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ABSTRACT

This 12th Grade teaching guide presents four units in industrial preparation for vocational students which serve as a general and specific vocational basis either for immediate post-secondary employment or for further formal technical education. The five diverse English curriculum units range from vocational preparation and chemistry topics to discussions of leisure time activities, the film, and current war and peace issues. A social studies unit deals primarily with the sociological impact of urbanization and the civic responsibilities of industry. An occupational relations unit provides sample case studies designed to increase self-understanding in interpersonal vocational relationships, and a laboratory unit of industrially-oriented chemistry topics is designed to develop nine specific laboratory skills. Developed as part of a 3-year comprehensive interdisciplinary program by a group of educators from Hackensack High School, New Jersey, the guide employs a wide variety of "real-life" approaches, such as role-playing, to insure student interest. General and specific program goals and rationales and teaching suggestions precede the student reading materials, multimedia resource materials, project lists, and bibliographies. This volume is planned for use with four others, available as VT 015 227-VT 015 230 in this issue. (AG)

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INDUSTRIAL PREP

Volume Five

CVTE E-8

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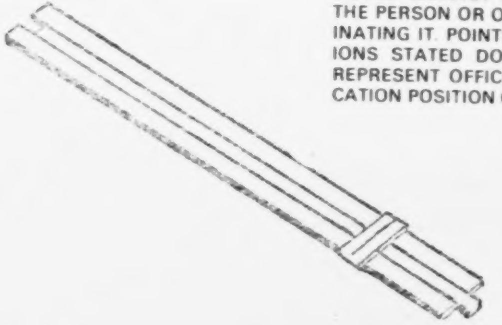

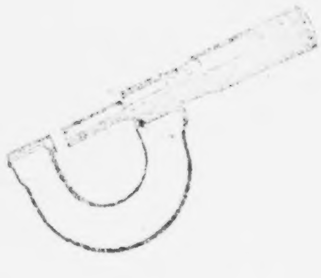

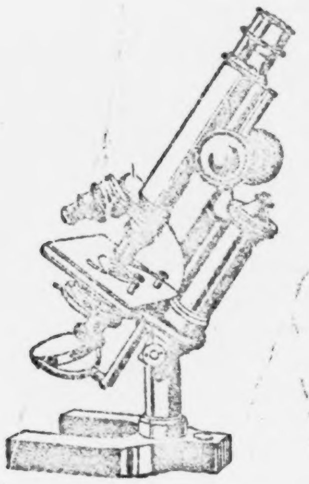

Senior Year

ENGLISH
CHEMISTRY
SOCIAL STUDIES
OCCUPATIONAL RELATIONS

Hackensack High School

VT015231

INDUST. PREP. VOL. 5
SENIOR YR.

Industrial Prep Social Studies

Introduction

This curriculum is designed for the industrially oriented student. His motivation in school is based on vocational training after graduation. He is headed towards a technical school, a job, or perhaps a two-year college. He has neither an interest in, nor a need to know, the battles and dates that comprised the old Social Studies Curriculum.

What is Social Studies? It is more than history, more than battles and dates. Social Studies is people. It includes the study of human behavior, the study of the economy, the study of society and its problems, and the study of social responsibility. These ideas should be emphasised in our curriculum. Social Studies for the Industrial Prep student should be taught using the conceptual approach rather than the factual. Ideals should be stressed. Subject matter should be made to revolve around people, rather than things, or places, or years. And the interests of the students should never stray from the teacher's mind.

The teacher's main responsibility is to create an atmosphere conducive to learning . . . ACTIVE learning. He must retain the interest of the class, for people learn best when they are interested in what is being taught. This interest should be cultivated through the direct participation of the student.

Teaching methods should have one goal in mind: total involvement of the student in the learning process. We are striving for the elimination of the teacher centered classroom. Techniques such as projects, problem-solving, class-discussions, and teaching-games replace the lecture, and question and answer recitations. The focus is now on the student.

The testing procedure also requires a definite change. Perhaps chapter or unit examinations could be eliminated in favor of a final unit project. Or, if one feels that factual testing should remain in the curriculum, perhaps review games, such as "hang-man" using social studies terms, or competing teams trying to stump each other, could be successfully employed.

The teacher must engage in continual re-evaluation of his materials and teaching methods. Every individual student brings his own needs, goals, and background to the classroom. The curriculum must be designed to reach out to as many of these as possible. Just as every individual is different, so is every class. What succeeds with one groups may fail with another. Therefore, the repeated re-evaluation and re-adjustment of teaching materials are vital to the success of any program.

The units included in this curriculum are designed for the new, conceptual social studies. They may be taught separately, each section included as it comes up in an American History course, or it can be taught as a concentrated area study of business and industry.

Wherever, or however, each individual teacher chooses to utilize this material, it is hoped that its main objective is not lost: the goal of making Social Studies a meaningful experience for each and every student.

Nancy Ellis

Goals and Objectives:

1. To instill a knowledge of the methods of industry and of business principles.

2. To develop a comprehension of the responsibilities of industry to society.

3. To develop an understanding of urban problems.

4. To bring about an awareness of the role of the worker in American life.

5. To inculcate strong positive feelings towards the various ethnic groups that are America.

6. To motivate learning through direct involvement and participation of the student.

7. To direct students towards broad horizons and towards diversified fields of endeavor.

8. To teach students to examine and evaluate all sides of a given issue.

9. To instill qualities of ambition, understanding, and integrity in all occupational pursuits.

INDUSTRIAL PREPARATORY PROGRAM

SENIOR YEAR

HACKENSACK HIGH SCHOOL
HACKENSACK, NEW JERSEY

HACKENSACK HIGH SCHOOL
HACKENSACK, NEW JERSEY

INDUSTRIAL PREPARATORY PROGRAM

SENIOR YEAR

1968

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The senior year's work of this program was made possible by the valuable assistance extended by the Division of Vocational Education of the New Jersey Department of Education.

INTRODUCTION

The senior year of the Industrial Preparatory Program increases the academic and occupational options open to each student. Opportunity is made available for either cooperative-work programs, additional shop training, or college preparatory subjects. The only required classes are chemistry, English, U.S. History, and physical education.

By partaking of a cooperative program a student is able to test his interests and academic and shop skills in an on-the-job situation. This is a chance for an employer to train an individual, perform a community service, and at the same time develop a potential employee. The program also affords the Industrial Prep student the opportunity of becoming introduced to the adult work world in a controlled situation. With school and industrial supervision the youngster can experience the independence associated with work for wages, and,will at the same time have the security of being part of a school program.

For those not ready or interested in this type of experience, there is the almost entire school elective program to choose from. If increased academic interests have arisen, a pupil can better prepare himself for community college or technical school entrance should he wish to go further educationally. Classes in mathematics, foreign languages, or the sciences are open to those students considering college work.

Advanced shop classes are also available to those boys wishing to learn more about a particular occupational field. Coupled with the scheduled Industrial Prep background, this should be a good opportunity for a student to delve deeper into a technical area.

In review of the program one could say that because of the relevance of teaching material, the correlation of subjects, the logic in presenting the courses, plus the sincere, applied interest of the staff, this approach to occupational education can meet its goals and objectives. It is an attempt to broaden occupational horizons and to stimulate an interest in learning, and the program appears to have accomplished this.

INDUSTRIAL PREP ENGLISH

SENIOR YEAR

INDUSTRIAL PREP ENGLISH

SENIOR YEAR

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INDUSTRIAL PREP ENGLISH

SENIOR YEAR

The Here Student And The Now Teacher

In Order to Educate, Schools Must Consider the Student's Individual Needs, Desires, and Interests.

The little boy who exclaimed that the emperor was naked may have been no different from the big boy who one day in class asked his teacher why they were studying a particular unit.

The emperor's reverie culminated in frustration when he perceived his nakedness as the teacher's reverie culminated in frustration as he failed to satisfactorily explain the importance of his unit.

This irrelevancy of material is a key cause of student disinterest and failure. In order to become successful in curriculum planning, it is necessary to make the student's individual needs, desires, and interests the prime objects of consideration. Too many times the curriculum planner fails to realize the curriculum and school exist for the education of students.

A New Deck of Cards Replaces the Old, Reshuffled Deck.

Industrial Prep English in the last three years has attempted to answer this challenge of the lack of student-oriented curricula. The course has evolved to a position where a new deck of cards has replaced the old, reshuffled deck which is present in many current English Curricula.

The course is based on five independent, integral units which attempt to develop communication skills. In order to teach these skills some of the units used are considered outside the normal province of the traditional English teacher. Thus last year's course was built around the following units: Work Preparation, Television, Physics, Economics, and Prejudice; while this year's units are based on: Work Entrance, The Film, Chemistry, War and Peace, and Leisure Time Activities. The rationale for this is that the prime consideration of English is the teaching of communication skills and the ends of this goal should not be confined by tradition. In addition whenever possible correlation with the student's other subject teachers is accomplished.

This current philosophy is geared to instill a desire in the student for the educational process. It accepts the idea that subject matter must be contemporary, relevant, and meaningful for modern society has impressed these factors in the minds of teenagers as necessary for education.

This observation does not preclude the original purpose of Industrial Prep English or any English course. The avowed objectives remain to teach the student how to read, write, speak, listen, and think with as much discernment and discrimination as possible, so that they will be able to adaquately function in society.

General goal

For most students the need to function in society is not in some obscure, frightening future, but now. Students have difficulty in adjusting to the present and teachers worry about preparing them for the future. School and the English classroom should enravel themselves from the philosophy that school is primarily a preparation for a later life, but accept a philosophy that puts into perspective the need for schools to prepare youngsters for the present and the future. Because of the innumerable problems that teenagers must meet and solve in their daily activities, many teenagers do not perceive the relevancy of school and academic education.

It is the purpose of the Industrial Prep English to provide for the student a contemporary, relevant, and meaningful curriculum. To do so, certain comparisons must be established.

First the highly motivated student is conscious of a time order. He does not freeze one aspect in time as does the less adaquately motivated student. The poorly motivated student is afraid of the future, confused about the past and concerned with the present. His discussions are about his car, his girl, his ballgame. Therefore Industrial Prep English relies on the contemporary more than any other time element. However the present is used many times as a staging area for excursions into the past in the field of English and anticipation about the future of each individual in society and of society itself.

Next the highly motivated student tends to value the abstract and the aesthetic while his counterpart places a greater value on the concrete and specific to achieve any relevancy. With this in mind Industrial Prep English adapts its lessons to provide a concrete structure. In literature, understanding of plot is valued above the understanding of style and tone; in writing, letters that can be sent and require an answer are preferred over the philosophical explanation of a novel, and speech is used above all areas of English because it is the faculty with which the boys are most proficient and it will be used by them more than writing as a means of communication.

Finally the meaning of the world is brought into the classroom not only through the printed page, but also with the electronic media. Students weaned on television and film and raised in the McLuhan Age place more meaning on the image than on the printed word. Therefore the appreciation of aesthetics and the importance of literary themes are brought to them by television and the film. In order to further enhance the image, the use of film and play production is encouraged. These exercises have as their ultimate goal the same objectives that the more traditional teacher has in his classroom, vis-a-vis the production of better readers, writers, listeners, speakers, and thinkers.

As always change is upon us, but, like aging, we are unaware of it until it is well established. The fields of Science and Mathematics have changed to meet the vast growth of knowledge. What makes the English teacher so conceited to think that his field is immune to change and need not meet this deluge of information and knowledge? As the electronic media have changed communication, and as the rocket has changed science, so we too must become a part of this change, for our students are a part of it already. We cannot teach for the pre-Sputnik Age when we are more than a decade into the Space Age. We must meet the challenge of our decade with new skills and techniques based on our newly acquired knowledge.

The Work-Study Student Proves the Philosophy is Correct.

Let it be understood that Industrial Prep English does intend for students to achieve in the present and accomplish for the future. The curriculum itself is a prime example of this procedure. In the sophomore and the junior years the subject matter intends to instill in the student certain broad, general industrial concepts and attitudes, i.e. dependability, initiative, punctuality, cooperation, the understanding of directions, and the conveying of instructions. Finally the senior year brings forth these concepts in actual practice. The sophomore and junior teachers give examples of the work world to the student, while in the senior year the reverse takes place as the work-study student now informs the teacher how the particular English assignment applies to industry and the specific job. Practice overtakes theory and fruition of two years of work flowers with the Industrial Prep student making the connection and showing his teacher that the lessons of the previous years have been fulfilled.

At the conclusion of his three years of study, the Industrial Prep student is able to make a number of choices. He can proceed into industry with a general background of industrial concepts or as an alternative he may continue his education and prepare for a more specialized job by attending a technical school, a two year community college, or a four year college with a technical curriculum. In the three years the Industrial Prep English curriculum has attempted to broaden his outlook, not to narrow it, to give him a variety of educational and vocational choices, not to limit them.

Lest Industrial Prep English be excommunicated for omitting the literary giants of English, it must be realized that the curriculum accepts the philosophy that there is value to the study of Chaucer, Shakespeare, and Milton, et al. However, what is relevant for one group of students may not be relevant for another group at the same time. The Industrial Prep English teacher hopes that his students eventually will read and be inspired by the masters of literature, but this appreciation cannot and should not be foisted on all high school students.

The Successful Curriculum Starts With the Student.

Education should be enjoyable; it is important to the individual; it must be achieved in order that a student can exist in the world of today, and productively enjoy the world of tomorrow. There are many ways of achieving these goals. Industrial Prep English desires the same goals that all good curricula desire, but Industrial Prep initiates its journey with the student.

It is with this type of program that the burden of education falls to the teacher. Too many teachers place the burden of education solely on the shoulders of the student. This curriculum removes part of the student's burden and shifts it to the teacher. Industrial Prep English firmly believes that if the student has failed to learn, the teacher has failed to teach. It is the desire of the program that the teacher not fail.

Joseph Ellis
Hackensack High School
1968

UNIT ONE

WORK ENTRANCE

I. Letter of Application

II. Résumé

III. Applications

IV. Classified Advertisements

V. Job Interview

VI. Film Making Project

This goes in Unit #2

The successful completion of the Industrial Prep Curriculum occurs when the student enters the work field. The junior year work unit attempts to guide the student into choosing a particular vocational field. The senior year work unit prepares the student for the actual entrance into that field. The unit assists them with locating a job, writing letters, and filling-out applications. The unit concludes by preparing the student for the job interview.

Practical experience is achieved through the use of personnel directors. They come into the classroom to instruct the students about the recruiting and hiring practices of companies and give advice about the job interview by conducting mock interviews.

Letter of Application

I. Form
  A. Heading
  B. Inside Address
  C. Body
  D. Closing
  E. Signature

II. What to Say?
  A. First Paragraph
    1. Source of knowledge of job
    2. Position applied for
    3. Make formal application
      a. Blind
      b. Recommendation
      c. Request

  B. Second Paragraph
    1. Reasons for being considered
      a. Education
      b. Experience
      c. Willingness to work and learn

  C. Third Paragraph--If there is no résumé, this paragraph contains references.

  D. Fourth Paragraph--(This is the third paragraph if there is an accompanying resumé.) Make yourself available for an interview.

Your Address
Your City
Date

Employer's Name and Title
Employer's Address
Employer's City

Salutation:

In the first paragraph explain how you became aware of the opening or the availability of the position for which you are applying. You might tell of your general and specific interest in the field. Make sure that you specifically state the position for which you are applying.

In the second paragraph explain briefly your reasons for believing that you are qualified for the position and why the employer should consider your application. Your education and work experience will assist you in making an impression.

In the third paragraph indicate where you may be contacted for further discussion and suggest a time and date to meet. If there are any special conditions affecting your availability for an interview, you should explain them.

Closing,

Your Full Name

Resumé

- A. Qualities
  - 1. Simple in structure
  - 2. Preferably typed
  - 3. Make a carbon for yourself
  - 4. Use good quality paper
  - 5. Make effective use of white space
  - 6. Be specific
  - 7. Be brief

- B. Organization
  - 1. Personal Information
    - a. Name
    - b. Address
    - c. Telephone Number
    - d. Date of Birth
    - e. Height - Weight
    - f. Sex
    - g. Marital Status
    - h. Draft Status

  - 2. Education
    - a. Name
    - b. Address
    - c. Dates of Attendance
    - d. Most recent school is put first

  - 3. Employment
    - a. Jobs
      - 1. Name of company
      - 2. Title held
      - 3. Dates
      - 4. Reason for leaving

    - b. Latest job first
    - c. Also any special skills

  - 4. References--Minimum of three
    - a. Put name (title), address, and telephone.
      - 1. Character
      - 2. School
      - 3. Work

    - b. Ask permission of person
    - c. If person must write a reference give him a stamped-addressed envelope.

Résumé

I. Personal

Name
Address:
Height:
Sex:

Date of Birth:
Telephone Number:
Weight:
Marital Status
Draft Status:

II. Education

School	Address	Course	Dates of Attendance

III. Employment

Name of Employer	Address	Job Title	Dates

Special Skills

IV. References

Name (Title)	Business Address	Business Telephone Number

Applications

- I. Carry With You
  - A. Proof of Birth Date
  - B. Social Security Card
  - C. Proof of Graduation
  - D. Important Names and Addresses
  - E. Pen
- II. Exhibit Following Qualities
  - A. Neatness
  - B. Truth
  - C. Accuracy
  - D. Legibility
  - E. Following Directions
- III. Demands of Application
  - A. Naturalized or Natural Born U. S. Citizen
  - B. "For Office Use Only" or "Do Not Write In This Space"
  - C. Physical Defects
  - D. Educational Experience
  - E. Previous Employment Record
  - F. Reference
  - G. Loyalty Oath
  - H. Supply a Picture
  - I. Salary Requirements
  - J. Autobiography
    - 1. Experiences
      - a. camps
      - b. clubs
      - c. home
      - d. employment
    - 2. Interests
      - a. intellectual
      - b. creative
      - c. hobbies
    - 3. Important Decisions You Have Made and Facts That Led You to These Decisions
      - a. friends
      - b. events
    - 4. Influences on Your Life
      - a. home
      - b. school
      - c. church
      - d. mass media
      - e. friends

Classified Advertisement

I. Definition - Advertising in a periodical which is placed under headings labeled as to content and purpose.

A. Content
1. Employment
2. Used cars
3. Household accessories
4. Real estate
5. Business service
6. Instruction
7. Boat and marine equipment

B. Purpose - While display advertising is aimed at the involuntary attention of large numbers of readers most of whom are not prospects, the small classified advertisement is aimed at the voluntary attention of live prospects who turn to the section because of real interest.

II. Size of Advertisement Depends on a Number of Factors
A. The size of company
B. The space used by competitors
C. The necessity for obtaining inquiries or sales at the lowest possible cost.
D. Announcements of new products or ideas
E. The amount of money available for advertising
F. Rates - Dependent on:
1. Number of lines
2. Number of days
3. Example of rates
a. 1 day - 3 lines - $ 3.75
b. 3 days - 3 lines - $ 8.91
c. 6 days - 3 lines - $13.50

Some Common Classified Usage

1.	agcy	agency
2.	altns	alterations
3.	arch	architect
4.	begnnr	beginner
5.	Bio	Biology
6.	BS	Bachelor of Science
7.	Chem	Chemistry
8.	Coll Grads	college graduates
9.	dept	department
10.	no dfse wk	no defense work
11.	an equal opportunity employer	hires all races, religions, ethnic groups
12.	no exp nec	no experience necessary
13.	expd	experienced
14.	expd instl or pub wks	experienced in installations or public works
15.	fcty	factory
16.	fee	fee that must be paid to employment agency
17.	fee neg	fee negotiable
18.	GED	General Educational Development
19.	HSG	High school graduate
20.	H'way	highway
21.	lic	license
22.	lino	linotype
23.	M	thousand dollars
24.	MA	Master of Arts
25.	mech'l	mechanical
26.	mgr	manager
27.	opty	opportunity
28.	Ph.d.	Doctor of Philosophy
29.	R & D	research and development
30.	resch	research
31.	tech	technical
32.	tri state area	tri state area--in our case, N.J., N.Y., and Pa.
33.	trng	training
34.	w/wo	with or without

Example of Classified Advertisement

POOR - TOO VAGUE

Mechanic wanted who can service electrical appliances. Must also be able to take orders occassionally from cutomers. He must have a neat appearance and a good personality.

BETTER

Salesman and serviceman wanted who can make repairs on electrical appliances, as washing machines, refrigerators, ironers, indoor wiring. He must be able to 1) solicit order from present users of our equipment, 2) collect payments on accounts, 3) furnish bond, the cost of which is paid by the company, and 4) take one evening course each week.

The persons who qualify will be paid a definite salary, but their ability to sell additional equipment will determine the main part of their income. Advancement to executive positions is possible.

The Interview

I. Preparation
  A. Time and Place
  B. Name and Address of Company
  C. Name of Interviewer
  D. Find out information about Company
    1. age
    2. location
    3. future
  E. Prepare a list of questions that you will want to ask.
  F. Bring a pen and pencil and notepaper, but do not take notes.
  G. Arrive ahead of schedule.
  H. Clothes
    1. Neat and clean
      a. cosmetics
      b. hair
      c. finger nails
    2. Not sporty
    3. Shoes--no holes--shined

II. Greetings
  A. Nervousness--Interviewer knows that you may be nervous.
  B. Greet him by name and pronounce it correctly.
  C. Let him take lead
    1. Shake hands
    2. Offer a chair
    3. Allow smoking
  D. Be prepared for surprise questions.
    1. What can I do for you?
    2. Tell me about yourself.
    3. Why are you interested in this company?
  E. Do not merely answer yes or no.
  F. Be prepared for personal questions.
  G. Sit up.

III. The Interviewer
  A. The Talker--He is looking for your interest, comprehension, and intelligence.
  B. The Quiet One--He may say very little, but expects you to show yourself.

IV. You
  A. Give your good points
  B. Lead him to your good qualities
  C. Tell the truth
  D. Know your future goals
  E. Never degrade anyone
  F. Do not play coy-recruiter knows there are, were, will be other interviews.
  G. Keep plugging even if you make mistakes.

V. Acceptance
   A. What if he offers a job on-the-spot?
      1. Are you sure you want it?
      2. Ask for time if you need it.
      3. Be tactful.
   B. Do not accept more than ona job.
   C. Salary
      1. Do not go under or overboard.
      2. Try to put burden on him.
      3. There are standard salaries for standard jobs.
      4. Starting salary vs. future salaries.
   D. "Do not call us; we will call you" Some do--many do not.
   E. Time should be about 15 to 30 minutes.

VI. Good-byes
   A. Thank him
   B. Follow instructions
   C. Keep trying

VII. Questions Frequently Asked on Interviews--from Your Job Interview - The New York Life Insurance Company, N.Y., N.Y.

1. What are your future vocational plans?
2. In what school activities have you participated? Why? Which did you enjoy the most?
3. How do you spend your spare time? What are your hobbies?
4. In what type of position are you most interested?
5. Why do you think you might like to work for our Company?
6. What jobs have you held? How were they obtained and why did you leave?
7. What courses did you like best? Least? Why?
8. Why did you choose your particular field of work?
9. What percentage of your college expenses did you earn? How?
10. How did you spend your vacation while in school?
11. What do you know about our company?
12. Do you feel that you have received a good general training?
13. What qualifications do you have that make you feel that you will be successful in your field?
14. What extracurricular offices have you held?
15. What are you ideas on salary?
16. How do you feel about your family?
17. How interested are you in sports?
18. If you were starting school, what courses would you take?
19. Can you forget your education and start from scratch?
20. Do you prefer any specific geographic location? Why?
21. Do you have a girl? Is it serious?
22. How much money do you hope to earn at age 30? 35?
23. Why did you decide to come to this particular company?
24. How will you rank in your graduating class in high school? Where will you probably rank in college?
25. Do you think that your extracurricular activities were worth the time you devoted to them? Why?

26. What do you think determines a man's progress in a good company?
27. What personal characteristics are necessary for success in your chosen field?
28. What do you think you would like this particular type of job?

VIII. Negative Factors for Interview--from Your Job Interview - the New York Life Insurance Company, N.Y., N.Y.

1. Poor personal appearance.
2. Overbearing--overaggressive--conceited "superiority complex"--"know-it-all."
3. Inability to express himself clearly--poor voice, diction, grammar.
4. Lack of planning for career--no purpose and goals.
5. Lack of interest and enthusiasm--passive, indifferent.
6. Lack of confidence and poise--nervousness--ill-at-ease.
7. Failure to participate in activities.
8. Overemphasis on money--interest only in best dollar offer.
9. Poor scholastic record--just got by.
10. Unwilling to start at the bottom--expects too much too soon.
11. Makes excuses--evasiveness--hedges on unfavorable factors in record.
12. Lack of tact.
13. Lack of maturity.
14. Lack of courtesty-ill mannered.
15. Condemnation of past employers.
16. Lack of social understanding.
17. Marked dislike for school work.
18. Lack of vitality.
19. Fails to look interviewer in the eyes.
20. Limp, fishy hand-shake.
21. Indecision.
22. Loafs during vacations--lakeside pleasures.
23. Unhappy married life.
24. Friction with parents.
25. Sloppy application blank.
26. Merely shopping around.
27. Wants job only for short time.
28. Little sense of humor.
29. Lack of knowledge of field of specialization.
30. Parents make decisions for him.
31. No interest in company or in industry.
32. Emphasis on whom he knows.
33. Unwillingness to go where we send him.
34. Cynical.
35. Low moral standards.
36. Lazy.
37. Intolerant--strong prejudices.
38. Narrow interests.
39. Spends much time in movies.
40. Poor handling of personal finances.

41. No interest in community activities.
42. Inability to take criticism.
43. Lack of appreciation of the value of experience.
44. Radical ideas.
45. Late to interview without good reason.
46. Never heard of company.
47. Failure to express appreciation for interviewer's time.
48. Asks no questions about the job.
49. High pressure type.
50. Indefinite response to questions.

Projects

I. Have students bring in an ad from the paper which they can actually fill.
   - A. Have them answer the ad for the classroom teacher with a letter of application and a resumé.
   - B. Get an application from a company and have students fill in the application.
   - C. Bring an interviewer in from this company and not only have him talk to the students in a general manner, but have him actually interview students with their application before him. After the mock interview, a critique can be made of the students.
   - D. The N. J. Bell Telephone Company is extremely helpful in lending personnel and equipment to the school system. Ask their interviewer to bring the film *Appointment with Tomorrow*.

II. Many variations of the above assignment can be made.
   - A. Actually have the pupils follow through with the assignment from ad to job acceptance.
     - 1. Students may get excused from school for their interview and report back to their fellow classmates. Many of them can have jobs ready upon graduation.

   - B. Arrange with the number of different companies to assist with the assignment by allowing company personnel and equipment to be used in the job searches.

UNIT TWO

FILM AND DRAMA

I. The Drama
II. Cinematography
III. Basic Film Language
IV. Film Workers
V. Discussion of Film
VI. Film Making
VII. Film Projects

The three part study of the mass media was initiated in the sophomore year with the study of the press, continued into the junior year with the study of broadcasting, and concludes in the senior year with the study of the film. Of all these forms of communication the film is the one that is currently "in" with the older teenage population. Because of the impact that film plays on the teenager both in the local movie houses and on television, this film unit attempts to foster an understanding and appreciation of the film as a modern communication art form. The unit is built around the production, screening, discussion, and analysis of film with the hope that discriminating film viewers will result.

Drama

I. Difference Between Play and Novel
  A. Action
    1. Novel may deviate from action of plot.
    2. Play works through what we see and hear from action.

  B. Limits
    1. Novel is free to roam.
    2. Play is limited to stage.

  C. Contact
    1. Novel is private.
    2. Play is social.

II. Signals of Playwright
  A. See
    1. costuming
    2. make-up
    3. gestures
    4. actions
    5. color

  B. Hear
    1. voices
    2. words
    3. song

III. The Stage
  A. Greeks
    1. natural
    2. open air
    3. hillsides
    4. bowl
    5. lack of tone and conversation
    6. subtle gentures useless

  B. Medieval
    1. open air
    2. small platforms
    3. one-act plays
    4. intimate
    5. in streets

  C. Elizabethan
    1. intimate
    2. boys as women
    3. masks
    4. 3 sided
    5. daylight
    6. body movements important
    7. levels in rear of stage

D. Restoration
1. small, indoor
2. intimate
3. proscenium arch introduced
4. depth to stage

E. Modern Times
1. box setting
2. idiomatic language
3. fourth wall

IV. Speech
A. Elements
1. stress
2. speed
3. strength
4. song
5. silence

B. Example: "Oh, who is there?"

V. The Character
A. Kind
1. flat--two-dimensional
a. predictable
b. one aspect of human nature

2. round--three-dimensional
a. individual
b. unpredictable
c. develop
d. intuiate

B. Greek and Medieval
1. kings and heroes
2. superhuman figures facing overwhelming odds
3. stand for mankind
4. human psychology to minimum

C. Shakespeare
1. simple types
2. consistent
3. hero is heroic; villain is villainous

D. Naturalistic
1. Individual
a. unique creature with certain qualities, memories and personal relationships
b. reasons for what he does

2. Avoiding distortions of high tragedy and broad comedy.
a. ordinary people
b. not eccentric or psychopathic
c. not wholly good or bad
d. not hero or villain, but both
e. recognizable world
f. consistent

VI. Plot
    A. Shape of a Play
        1. exposition--introduction to situation
        2. complication--actions of play among characters leading to crisis
        3. crisis--climax or turning point of tension
        4. denouement--concluding action

    B. Subplots--enhances main plot

VII. Kinds of Drama
    A. Tragedy
        1. exalt man as an individual
        2. punish man for his sins
        3. encourages compassion

    B. Comedy
        1. belittle man's dignity
        2. marks him for his unimportance
        3. intellect rather than compassion

    C. Elements of Comedy
        1. relaxing of tension
        2. incongruity

    D. Difference Between Tragedy and Melodrama
        1. Tragedy
            a. hero of stature
            b. inevitability of outcome
            c. reason and purpose in punishment

        2. Melodrama
            a. virtuous characters
            b. sweet innocent girls--bold-frank young men
            c. confront imminent danger to life and honor
            d. courage and virtue prevail
            e. happy ending

VIII. Drama in the Media
    A. Films
        1. size of image
        2. movement of camera
        3. editing

    B. Differences Drama and Film
        1. Drama
            a. imagination
            b. dialogue projected

        2. Film
            a. visual
            b. restrained acting and speaking

C. Radio
  1. release imagination
  2. intimate

D. T. V.
  1. sustained action of actors
  2. small acting space
  3. close up
  4. intimate
  5. immediacy
  6. little to imagination

CINEMATOGRAPHY

Camera Angles

- I. Types
  - A. Objective--Impersonal View
    - 1. camera off on sideline
    - 2. actors appear unaware of camera
    - 3. actors should not look into camera

  - B. Subjective--Personal Viewpoint
    - 1. a camera is used in lieu of a screen performer
    - 2. a camera is used in lieu of an unseen audience

- II. Placement of Camera for Distance Shots
  - A. Long Shot--Shows Entire Area of Action
    - 1. used for setting
    - 2. effective use of entrances and exits
    - 3. shows movement
    - 4. should be used only a short time

  - B. Medium Shot--Between Long Shots and Close-Ups
    - 1. filmed to show from above knees or below waist
    - 2. used for movements and actions
    - 3. effective for group settings

  - C. Close-Ups--Usually Head and Shoulders Shots

- III. Placement of Camera for Angles
  - A. Eye Level--Subject's Eye Level
  - B. High Angles--Camera Tilted Downward
    - 1. camera is higher than subject
    - 2. keeps action in focus
    - 3. perceive a pattern
    - 4. view a setting
    - 5. achieve superiority over an object
    - 6. reduce the height of an object
    - 7. slows down movement

  - C. Low Angle--Camera Tilted Upward
    - 1. inspires awe or excitement
    - 2. increases height or speed of subject
    - 3. eliminate unwanted foreground
    - 4. eliminate unwanted background

  - D. Angle-plus-Angle--Camera is angled in relation to the subject and titled either upward or downward.
    - 1. many facets of subject
    - 2. forceful perspective
    - 3. three dimensional effect

Continuity

- I. Time and Space
  - A. Present--Now
    - 1. event as it happens
    - 2. viewer participation
  - B. Past
    - 1. occurring in past
      - a. as prologue to present
      - b. "You Were There," attitude
    - 2. flashback
      - a. clear-up problems
      - b. provides background information
      - c. viewers may become lost in plot
  - C. Future
    - 1. occurring in the future
      - a. predicted, projected or imagined
      - b. audience should be aware of time element
    - 2. flashforward
      - a. describes events that will, may or could happen
      - b. can be dream or imagination
  - D. Space
    - 1. make viewer aware of location
    - 2. make viewer aware of direction
- II. Techniques
  - A. Master Scene--Continuous chronological take of an event in one single setting.
    - 1. Advantages
      - a. complete coverage without holdups
      - b. close short portions easily repeated
      - c. no interruptions
    - 2. Disadvantages
      - a. actors must be perfect for a long period of time
      - b. much planning
  - B. Triple-Take--An overlapping of actions at beginning and end of each short.
    - 1. Advantages
      - a. duplication of entire sequence is unnecessary
      - b. mistakes easier to cover up
      - c. more convenient to actor
    - 2. Disadvantages
      - a. hodgepodge in off-the-cuff filming
      - b. too much time may be spent trying to match shots
      - c. duplication of lighting may prove difficult

- III. Screen Direction
  - A. Dyamic Motion--Bodies in Motion
    - 1. Constant--Travel in one direction
      - a. shows progress
      - b. when cutting from outside to inside keep on same side
    - 2. Contrast--Travel in opposite directions
      - a. shows return
      - b. shows meeting
    - 3. Neutral--Head-on tail away
      - a. must be centered
      - b. tracking--camera moves directly front or behind action
      - c. in high or low angle shot the subject travels toward or under or over camera
      - d. when to use
        - 1. for variety
        - 2. for impact
        - 3. for distraction
    - 4. Action Axis--establishing or maintaining screen direction
      - a. camera is situated on one side of axis of subjects
      - b. movement is always in one direction
      - c. at most the camera may move to the middle of the axis
      - d. on curves the subject must move in the same direction even though the camera may have to cross axis line
      - e. every subject shown leaving one locale must be shown entering another
      - f. map direction should be shown over great distances
        - 1. east on right of screen
        - 2. west on left of screen
        - 3. north--lower left to upper right of screen
        - 4. south--upper left to lower right of screen

  - B. Static Screen Direction--The way players face and look on screen.
    - 1. Action axis is on one side of two people facing each other.
    - 2. Actors are not to look into camera lens.
    - 3. A new axis may be drawn at the end of each shot.

  - C. Transitional Devices
    - 1. Optical
      - a. fade-in: black screen gradually brightens into an image to begin a story or sequence
      - b. fade-out: an image gradually darkens to black and is used to end a story or sequence
        - 1. employed in pairs
        - 2. when fades between sequences occur in same locale, this indicates passage of time

c. dissolves--blends one scene into another--fade-in superimposed on fade-out
1. covers time lapse
2. covers change in locale
3. distorted dissolves indicate switch in subjects subconcious

d. wipes-moving optical effects in which one scene seems to push another scene off the screen

2. Sound Devices
a. narration
b. dialogue
c. monologue
d. songs

III. Cutting--From Cameraman's Point of View
A. Continuity Cuttings
1. Matched shots
a. players' movements, positions, and looks should match through shots spliced together
b. when moving straight in from a long to medium shot, a mismatch becomes discernible and camera should be shifted to a slightly different angle

2. Cut-aways--they need not be matched because they are secondary actions.

B. Compilation Cutting--Usually used on newsreel or documentary type films.
1. Connected by continuous narration
2. No real rules

C. Cross Cutting--Parallel editing of two or more events in an alternating pattern. "Meanwhile back at the ranch."
1. Heightens interest
2. Provides conflict
3. Increases tension
4. Heightens suspense
5. Makes comparisons

IV. Close-Ups
A. Size
1. Medium--midway between waist and shoulder to above head.
2. Head and Shoulders--from below the shoulders to above the head.
3. Head--head only.
4. Choker--from below lips to above eyes.

B. Types
   1. Cut-in--A magnified portion of the preceding larger scene.
      a. part of main action
      b. continuous main action
      c. how to use
         1. plays up narrative highlights
         2. isolate subject matter
         3. magnify small scale action
         4. distract audience
         5. substitute for hidden action

      d. establishment of cut-in, close-ups
         1. established in preceding long shot
         2. goes directly into the heart of the scene

   2. Cut-away, Close-Ups: Related to, but not a part of, the previous scene. Depicts secondary action connected to the narrative.
      a. presents reactions of off-screen players
      b. cues the audience on how they should react
      c. comments on the principal event by showing corresponding action
      d. motivates a sequence
      e. replaces scenes too gruesome or expensive to depict
      f. moves audience outside the area depicted
      g. not necessary to establish cut-away close-ups

V. Composition Lanaguage
   A. Lines
      1. Follow contours
      2. Do not divide picture into equal parts
      3. Interpretations
         a. straight lines--masculinity
         b. curved lines--feminity
         c. sharply curved lines--action and gaiety
         d. long vertical lines with tapering ends--dignified beauty
         e. long horizontal lines--quiet
         f. tall vertical lines--strength
         g. parallel diagonal lines--action--energy--violence
         h. opposing diagonal lines--conflict
         i. strong, heavy, sharp lines--brightness--laughter
         j. soft lines--solemnity

   B. Form
      1. Triangular--strength
      2. Circular--oval--hold attention
      3. Cross--unity and force
      4. Radiating lines--variation of cross
      5. L-shaped--informal

C. Masses--Pictoral Weight
    1. Isolated--strength
    2. Unified--domination
    3. Dark vs. light or vice-versa--emphasis
    4. Heavy base--immovable

D. Movements
    1. Horizontal--travel
    2. Vertical ascending--freedom, growth
       Vertical descending--danger, crushing power
    3. Diagonal--opposing forces--power
    4. Curved--fear
    5. Circular--cheerfulness
    6. Pendulum--monotony

E. Balance
    1. a moving object has more weight than a stationary object
    2. an object moving towards the camera has greater weight than an object moving away from the camera
    3. upper part of a picture is heavier than the lower part of the picture
    4. the right side attracts more attention than the left side

Reference: The Five C's of Cinematography by Joseph V. Mascelli, A. S. C. Cine/Grafic Publications, Hollywood, California, 1965.

Basic Film Language

I. Camera Angle

A. Eye-Level--A shot taken from the eye-level of an observer of average height, or from the subject's eye level.

B. High Angle--A shot in which the camera is tilted downward to view the subject.

C. Low Angle--A shot in which the camera is tilted upward to view the subject.

D. Angle-Plus-Angle--A shot filmed with a camera angled in relation to the subject, and tilted either upward or downward.

II. Camera Movement

A. Tilting--Moving the camera up or down from a stationary place.

B. Panning--Moving the camera from one side to another from a stationary place.

C. Dolly--Vehicle on which camera and cameraman can be wheeled about during the taking of a shot.

D. Tracking--Laying tracks around a particular area on which the camera moves on its wheeled platform.

E. Trucking--Shooting with a camera in movement from a a truck or car.

F. Boom--A device from which a recording microphone can be suspended and moved from one position to another during shooting.

G. Crane--A device from which a camera can be suspended and moved from one position to another during shooting.

H. Zoom Shot--An optical effect that makes the camera appear to change from a distant shot to a near shot, giving the impression that the camera has swung towards the subject.

III. Camera Placement

A. Close-Up--A shot taken with the camera very close or apparently very close to the subject whereby the subject's face takes up the entire screen. It is used to reflect the emotional state of an individual.

B. Medium Shot--A three-quarter view of the subject or subjects used to show characters and their environmental relationships.

C. Long Shot--A shot taken a considerable distance from the subject used to establish setting.

IV. Filming
  A. Shot--A continuous view filmed by one camera without interruption.
  B. Scene--A series of shots depecting a continuous event.
  C. Sequence--A series of scenes concerned with the development of one subject or idea and complete in itself.
  D. Take--A single recording of a shot.
  E. Set--A specially constructed artificial setting for a film scene or shot.
  F. Scenario--The written description plan of production.

V. The Film
  A. Cut-The joining of two pieces of film by cement.
  B. Splice--To join film.
  C. Animation--Arranging a photographing static drawings of objects so that when the photographs are shown cinematographically they will produce the illusion of movement.
  D. Slow Motion--Means by which movement in a shot is represented as taking place more slowly than it did in reality; the opposite of accelerated motion. Slow motion is achieved by running the camera abnormally fast during shooting; accelerated motion is achieved by running the camera abnormally slow.

VI. Transition
  A. Fade-In--The beginning of a shot which starts in darkness and gradually lightens up to full brightness.
  B. Fade-Out--The end of a shot which starts in brightness and gradually darkens to complete blackness.
  C. Dissolve--A blending of one scene into another. A fade-in that is superimposed on a fade-out.
  D. Wipe--An optical effect in which one scene seems to push another scene off the screen.
  E. Montage--A series of short scenes--connected by straight cuts, dissolves or wipes--used to condense time or space.

Film Workers

I. Studio
   - A. Producer
   - B. Director
   - C. Production Manager
   - D. Assistant Director
   - E. Script Clerk
   - F. Dialogue Coach

II. Sets
   - A. Art Director
   - B. Carpenter
   - C. Grips
   - D. Scenics

III. Shooting
   - A. Director of Photography
   - B. Camera Man
   - C. Assistant Camera Man
   - D. Still Man

IV. Sound
   - A. Recordist
   - B. Mixer
   - C. Cableman

V. Electric
   - A. Gaffer
   - B. Best Boy
   - C. Electricians
   - D. General Operator

VI. Property
   - A. Property Man
   - B. Set Decorator
   - C. Special Effects

Film Discussion

I. Content
  A. Setting
    1. In what time period does story take place?
    2. How do we know?
    3. Where does the story take place?
    4. How do we know?
    5. How are the characters affected by their environment?
    6. Was there anything significant about language, dress, structures, and transportation facilities?
    7. Could this film have taken place in another setting?

  B. Plot
    1. What starts the action moving?
    2. Where is the climax?
    3. Is the plot realistic? confusing? exciting? dramatic?
    4. How have film techniques effected the plot?
    5. Would the plot have been changed if done in another medium?
    6. What influence does plot have on characters?

  C. Characterization
    1. How are characters revealed to the audience?
    2. What type of characters are there?
    3. Are the characters sterotyped?
    4. What is the relationship between characters?
    5. How did the characters handle their problems?
    6. Is there any growth in the characters?

  D. Theme
    1. What is the author's theme?
    2. Do the film and author say the same thing?
    3. Has the theme changed by switching media?

II. Technique
  A. Acting
    1. Do the actors physically fit their parts?
    2. Do the actors interpret the characters satisfactorily?
    3. What other actors could have been chosen to play the roles?
    4. How believable is the acting?
    5. Was the acting overly dramatic?

  B. Setting
    1. Was the setting genuine?
    2. What parts were done in the studio and what parts done on location?
    3. Was the location the actual setting of the story or a similarly looking one?

C. Sound and Music
   1. Did the music set a mood?
   2. Was the sound in the film distracting?
   3. Did the sound and music contribute to the understanding and enjoyment of the film?

D. Photography
   1. Was the camera positioned in any one place?
   2. Were the camera angles effective?
   3. Was there a prevalence of any shots?
   4. Did the color add or detract from the film?
   5. Was there use of any trick photography?
   6. Are there any camera shots that are memorable?
   7. What shots should have been done differently?
   8. What symbolism was shown?
   9. Is there anything significant about the opening of the film?

Film Making Project

I. Equipment
   A. Camera
   B. Tripod
   C. Lights
   D. Film
   E. Splicer
   F. Film Editor

II. Still Photography
   A. Have students take and criticize some still photographs. Warn them to be specially careful of the following qualities.
      1. Lighting
      2. Compostion
      3. Angles
      4. Distance

   B. Criticize photographs of a number of publications
      1. *Life* Magazine
      2. A professional photographic book
      3. School yearbook

III. Scenario
   A. Have a brainstorm session about what students could film.
   B. Have each student write a synopsis about his film.
   C. Choose one or two best scenarios.
   D. Guide students on potential problems.
      1. use area of school or home; it is easier
      2. do their own ideas, not a copy from television or movies
      3. try to choose ideas from personal experiences
      4. pick ideas from their own point of view
      5. choose a topic the students are interested in
      6. be visual
      7. strive for simplicity
      8. it is better to film outside

   E. Show some student made films.
      1. from school
      2. from other schools
      3. from National Student Association Film Festival

IV. Scripts
    A. Be specific
    B. Use 3 x 5 cards and show:
        1. actors' actions
        2. camera angles
        3. camera distance
        4. time length of each shot
        5. lighting

V. Create a Story Board
    A. Put 3 x 5 cards up
    B. Take pictures of key shots
    C. Make final adjustments before shooting

VI. Shooting
    A. Have schedule of shooting
    B. Assign specific jobs
    C. Keep audience to a minimum
    D. Develop immediately

VII. Splicing
    A. Make sure necessary materials are available.
    B. Constant review of film must be made before any editing is done.

Film Projects

1. Follow the newspaper criticism of one film and compare what different reviewers say about the film. i.e. acting, scenery, costumes, directions, story, photography, and music.

2. Follow one reviewer for a length of time and attempt to establish some characteristics of the reviewer.

3. Have students report on a number of current popular movies that they have seen. Establish any similarities in plot, setting, characterization, or theme. Can criteria be established for judging the potential popularity of a movie?

4. Recreate a film based on a television drama show or vice versa. Point out any changes that must be made when crossing medium.

5. Create a television advertisement for a product.

6. Build and shoot a number of special effects for a film. i.e. naval maneuvers, a thunder and lightening sequence, a rocket ship take-off, a forest fire.

7. Compare the current favorite movie stars of the 60's to favorites of the 50's, 40's, 30's, and 20's.
   a. What made these people stars?
   b. How are they similiar or how do they differ from each other?
   c. What contributes to the rise of some stars and the downfall of others?

8. Have students view a motion picture based on a novel they have read.
   a. Did the film characters resemble the book characters?
   b. Was the screen adaptation faithful to the plot of the novel?
   c. Which medium was more effective?

9. Compare display and poster advertising with actual films.
   a. Are pictures and dialogue used in advertisements actually used in the films?
   b. Do the advertisements stress any immodesty of the films?
   c. Are comments of reviewers used and taken out of content?
   d. How does the advertisement appeal to the viewer?

10. Find out how the Motion Picture Industry handles censorship. (The Motion Picture Production Code of the Motion Picture Association of America, Inc.)

11. Find out how censorship of films is handled in the community? pressure groups? municipal ordnances? citizen committees?

12. List the different scientific phenomena that have changed the movies.

13. List the aesthetic phenomena that have changed the movies.

UNIT THREE

CHEMISTRY

I. The Précis
II. Writing Directions
III. Critical Listening
IV. Chemistry Projects

In each of the three years of Industrial Prep English correlation is made with key subjects. In the sophomore year it is Shop Math with projects in Measurement and Packaging and Biology with the Human Behavior Project. The junior year correlates with the Physics Testing Project. Finally, the senior year keys on Chemistry with two projects: Chemistry in the Consumer World and Milestone Discoveries in Chemistry.

The concept of correlation is planned primarily to make the student aware of the interrelationship of knowledge in his environment. A secondary purpose of correlation is to impress the student with the benefits of cooperation with his fellow students by the example of teamwork set by his subject teachers.

During personal investigation with a number of major chemical firms in the area, it was discovered that the newer laboratory technicians lacked basic writing skills demanded in this line of work. Therefore, a major portion of the correlated units are concerned with the teaching of basic writing skills. In addition, the specific chemistry projects attempt to instill chemical procedures and thinking.

The Précis

I. Definition
   A. Short Summary
      1. not a paraphrase
      2. 1/3 original length

   B. Gives only the heart of a passage
      1. omit repetition
      2. omit examples

   C. Written in the words of a person writing it, not in the words of the original selection.

   D. Written from the point of view of the author whose work is being summarized.

II. Procedure
   A. Read sentence by sentence
   B. Grasp writer's main point
   C. Write outline of main subdivisions
   D. Use your own words
   E. Revise
   F. Reduce

III. Necessity of Writing
   A. Record finding of others
   B. Reduce your findings for presentation to others

IV. Standards of Précis Writing
   A. Has the essential original thought been preserved?
   B. Has any important part of the thought been omitted?
   C. Have the author's ideas been given the same relative importance, or emphasis, as in the original?
   D. Does the summary preserve the point of view of the original?
   E. Is the summary expressed in good English?

V. Projects
   A. Have students reduce a long involved sentence to the basic meaning,
      Example:
      1a. Under certain conditions of temperature and relative humidity, the moisture content of the air seems to tend to increase the likelihood of oxidation of iron and certain iron compounds when exposed to these atmospheres.
      1b. Iron will rust in damp atmospheres.

Example:
2a. Weather predictions are not likely to be as
reliable as one might wish.
2b. Weather predictions are unreliable.

B. Have students reduce a long paragraph.
John E. Warriner - p. 424 and 426; Harcourt, Brace, and Co., N.Y., N.Y., 1957. *English Grammar and Composition--Complete Course*

Example: 1a.

Any bobsled run is a masterpiece of engineering skill. Lake Placid probably being more artfully devised than most. From the top of the hill to the bottom there is an invisible driving line, the line of safety and the line of greatest speed. One cannot come into the giant horseshoe turns of Whiteface and Shady Corner, each some twenty-five feet high, in haphazard fashion. The invisible driving line has to be found and followed. Centrifugal force has to be fought all the way. If a sled approaches too low, it never will swerve down in time. If it comes in too high, that force will throw it over the top. The right line will take it in at the proper angle, carry it safely up near the lip of the wall and send it darting precipitously down the far slope.

Example: 2a.

The coach does not always open up to the visiting reporter and acquaint him with the full potentialities of his new men. The tendency is rather to minimize their ability. The coach has a mortal fear of overconfidence in the squad. He particularly dreads the effect of too much publicity on his younger players. He does not like to have his team elevated to the position of favorite. It's a matter of psychology, and also he doesn't want to put himself on the spot. If his team or his players individually get a big build-up, the public and especially the alumni expect big things of them. If they don't come through, the criticism is all the more severe. It looks as though he has failed to make the most of his material, and he begins to worry about keeping his job.

So the coach would rather the reporter didn't say too many nice things about his squad until after the big game is won or the season is over. Then there is no danger of overconfidence and the pressure is off the men. You can't blame him for this attitude. Even when he has the makings of a great team, so many things can happen to wreck the season--the setting in of overconfidence, the loss through injury of one or two key players, a missed signal or the failure to have a block on a vitally important play, the development of the opponents, who may have just as good material and better luck.

Writing Directions

I. The Writer
  A. Breakdown the process or parts into steps
  B. Write each step in a sequential pattern
  C. Be explicit
    1. use numbers
    2. underline
    3. headings

  D. Use examples
  E. Labor over the obvious
  F. Be brief
  G. Use verbs
  H. Give orders
  I. Use whole sentences
  J. Be exact

II. The Reader
  A. Write to the intelligence and experience of the reader
  B. It should not be necessary for the reader to do any thinking

III. Format for Experiment
  A. Purpose
  B. Apparatus
  C. Procedure
  D. Conclusion

IV. Practice
  A. Dividing object or procedures into parts
    1. a pencil
    2. a house
    3. a rifle
    4. a car
    5. athletics
    6. education
    7. the family unit

  B. Writing Directions
    1. walking to school
    2. changing a tire
    3. playing monopoly
    4. playing offensive halfback
    5. throwing a curveball
    6. mouth-to-mouth resuscitation
    7. drag racing

  C. A shooting script for a film production

Critical Listening

I. Definition
   A. Non-emotional
   B. Reasoning
   C. Thinking

II. Uses of Persuasion
   A. Advertisements
   B. Politics

III. The Speaker
   A. Language
      1. loaded words
         a. vague meaning
         b. may stand alone out of context
         c. positive and negative sides
            1. young - immature
            2. best - conceited
            3. benevolent - imperialistic
            4. liberal - communist
            5. sit-down - strike
            6. obedient - slave

         d. examples:
            1. Is a girl a vision or a sight?
            2. Is the U.S. in Viet Nam for conquest or defence?
            3. Does Fab come in small, medium, or large packages or large, giant, or economy?
            4. Why would Wheaties be "the Breakfast of Champions?"
            5. Why does Ultra-Brite give sex-appeal?

      2. the smear
         a. unsupported statement
         b. mudslinging
         c. a label
         d. examples:
            1. communist
            2. divorced
            3. cheat

      3. slogans
         a. short
         b. remembered
         c. simplified argument
         d. examples:
            1. "Make the World Safe for Democracy"
            2. "He Kept Us Out of War"
            3. "Peace and Prosperity"
            4. "Liberty-Equality-Fraternity"
            5. "Better Red, than Dead"
            6. "Remember the Maine"
            7. "The Great Society"

B. Reasoning
   1. Testimonial--popular or glamorous people attempt to convince us to vote or choose a particular way
      a. Is he an authority on the subject?
      b. Is he unbiased?

   2. Unsupported Statements--statements must show proof to be true.
      a. Are definite figures shown?
      b. Are the words vague?
      c. Are people who support statement legitimate?

   3. Cause and Effect--every effect must have a proportionate cause
      a. Are all facets viewed?
      b. Is something being omitted?
      c. Could statements be coincidental?

   4. Straw Man--restate opponents position inadequately and then proceed to destroy it.
      a. Is opponent's statement truly stated?
      b. Is opponent's statement fully stated in context?
      c. Is opponent's argument too simply destroyed?

   5. Generalization from insufficient evidence.
      a. Where is all the evidence?
      b. Where is the source of the evidence?
      c. Can generalization be made about people?
      d. Is generalization scientific?

   6. Bandwagon--go along with the crowd.
      a. Can we say everyone?
      b. Is evidence too limited?
      c. Do numbers make right?

C. Practice for Excellence
   1. Be an active listener by reacting to the speaker's words.
   2. Look for major points at the beginning and the end of a speech.
   3. Look for examples that support key ideas.
   4. Anticipate future ideas.
   5. Rephrase speaker's words.
   6. Look for reasons for speaker's ideas.
   7. Write down important points.

Chemistry Projects

I. Analyze A Consumer Product and Report on It by Using Outline
   A. Foods
      1. Low Calorie Sodas
      2. Dehydrated Foods
      3. Non-Dairy Creamers
      4. Meat Tenderizers
      5. Low Calorie Foods
      6. Artificial Dessert Toppings

   B. Materials
      1. Gasoline
      2. Hair spray
      3. Bleaches
      4. Perfumes
      5. Cold creams
      6. Fibers--perma-press
      7. Tires
      8. Sun-tan lotions
      9. Patent medicines
      10. Soaps and detergents
      11. Toothpastes
      12. Furniture and auto polishes
      13. Hair tonics
      14. Inks

II. Analyze an Experiment Performed by a Giant in the Field of Chemistry and Report on It by Using Outline
   A. Lavoisier
   B. Lister
   C. Cavandish
   D. Mosley
   E. Scheele
   F. Goodyear
   G. Westinghouse
   H. Bessemer

Chemistry in the Consumer World

Product Analysis

I. The Product
  A. Brand Name
  B. Manufacturing Company
  C. Price
  D. Ingredients or Materials that Make-up Product
  E. Function of Product

II. The Manufacturing Company
  A. Reasons for Creation
  B. Problems encountered in Marketing Product
  C. Story behind the Name
  D. Cost to Manufacturer

III. Consumer
  A. Reasons for Use
  B. Effects of Advertising
  C. Need for this Brand over Competing Brand
  D. Prices of Competing Brands
  E. Knowledge of Make-up of Product

IV. Chemical, Biological, or Physical Analysis
  A. Make-Up of Product
  B. Analysis of Materials
    1. Laboratory
    2. Indexes
    3. Literature on Product

  C. Effects on Body
    1. Physiological
    2. Psychological

  D. Comparison of Advertising to the Results of Use
  E. Difference Between Competing Brands of Similar Product
  F. Comparison of Substitue Product to Original Product

V. Governmental and Independent Testing
  A. U. S. Pure Food and Drug Administration
  B. American Chemical Society

Milestone Discoveries in Chemistry

I. Chemist Who Performed Experiment
    A. Born - Died
    B. Dates of Experiment

II. Idea for Experiment
    A. Previous Attempts or Leads
    B. Reason for His Attempt
    C. Beliefs or Superstitions That Had To Be Combated

III. Problems Encountered
    A. To Complete Experiment
    B. After Experiment Completed

IV. Acceptance
    A. By Society
    B. By Science

V. Analysis of Experiment
    A. Objective
    B. Apparatus
    C. Procedure
    D. Conclusion

VI. Importance and Effect
    A. Chemistry and Science
    B. Common Man

UNIT FOUR

WAR AND PEACE

I. The Many Faces of War
II. Ideas from The Great Books
III. Film Shorts
IV. Films--Full Length
V. Short Stories--Records
VI. Novels
VII. Poetry

The universal problem of war and peace is the multi-media approach to literature that this unit takes. The forces of war and peace are constantly at work on humanity. However, the effect of these forces are felt more closely by this generation of teenage boys, who may be called to bear the military burden. Consequently they are most concerned by war and peace issues. The attempt of this unit is to have the students cover three different aspects of war: the causes, fighting, and results, and to evaluate the effects that war has on people and society. It is felt that a keener understanding of history and the present will arise out of this study. Ultimately the desire is to take a look at violence in general which has run rampant in America during the sixties.

War and Peace

- I. Kinds of War
  - A. Civil
  - B. States
  - C. Religious
  - D. Class
  - E. Racial

- II. Rationalization of War
  - A. Just vs. Unjust
  - B. Defense vs. Offense
  - C. Safety vs. Danger
  - D. Survival vs. Destruction

- III. Phenomenon of War
  - A. Inevitability
  - B. Desirability
  - C. Futility

- IV. Causes
  - A. Social
  - B. Political
  - C. Economic

- V. Results
  - A. Alterations
    - 1. Social
    - 2. Political
    - 3. Economic

  - B. Relationships
    - 1. State-State
    - 2. Individual-Individual
    - 3. Individual-State

  - C. Benefits to Victors
  - D. Dangers to Loser

Great Ideas from the Great Books
by Dr. Mortimer J. Adler

Washington Square Press, N. Y., N. Y. , 1963

#19 The Nature of War and Peace

Dear Dr. Adler,

Like most people today, I am bewildered by the present period of international tension and crisis. We don't seem to be at war--there is no shooting going on--and yet we don't seem to be at peace, either. What is "war" and what is "peace"? Is this a time of war or of peace? Is "peace on earth" a real possibility for mankind?

D. D.

Dear D. D.,

The simplest and most common view of war is that it is a state of armed conflict between nations. Peace, then, is a state or period when there is no armed conflict. According to this view, the United States went to war from April, 1917 to November 1918. Then the United States was at peace until December, 1941, when it entered the Second World War.

If this view of war and peace is correct, we should have been at peace since V-J Day in 1945, save for the "police action" in Korea. But few people would assert that the past sixteen years have been a time of peace. The common idea of war and peace simply does not apply to the present period. Indeed, we characterize this time as one of "cold" war, as opposed to the "hot" war of actual fighting.

Our view of war, then, must be broadened to include both armed conflict and battles of diplomacy, economic aid, and propaganda. War is war, whether it is "hot" or "cold." The struggle for power and prestige among the nations goes on all the time. Only the means vary, and whether these be armed force or diplomatic pressure or other nonviolent means depends on the occasion.

It follows, then, that peace is not merely a negative thing--the absence of armed conflict. What real, positive peace among the nations would be we may see by considering the state of affairs in local, state, and national communities. In our civil society, peace and order, not war, are the normal state of things. The whole meaning and purpose of civil society is peace and order. Civil government creates civil peace. Individuals who violate the law are disturbers of the peace and are dealt with accordingly.

The great thinkers of the past are helpful to us in three ways in considering the question of war and peace. They show us that the wider definition of war is the correct one. They indicate the connection between civil peace and civil government. And they point to how this insight may be applied to the world of nations.

Thucydides is as aware as we are that a peace treaty is usually only an armistice in a war that is continuously going on. Hobbes sees that "war consists not in battle only or in the act of fighting" but in the will to fight, the attitude of hostility between nations. And in our own century Veblen sees that "the state of war is the natural relation of one power to another." The term "cold war" may be new, but the state of affairs to which it refers is quite ancient.

More important for us in the present crisis are the insights the great books give us into the connection between peace and law. Locke observes that there are only two ways of settling disputes between men--law or force--and where there is no law, force is the ultimate arbiter. The way of law is the way of peace.

Kant applies this analysis to the international scene, which he sees as a lawless state of anarchy where the right of the stronger prevails. He calls upon the nations to emerge from this state of savagery and to enter into a federation of nations where law and peace would prevail. Dante, centuries earlier, proposes a single world government to provide enduring peace for the whole of mankind.

The common point which all these thinkers make is that peace is a state of affairs in which men are willing to settle disputes by discussion instead of force. Civil peace prevails at present within all legally constituted societies. A state of war--sometimes "hot," sometimes "cold"--prevails among the nations.

Whether a state of real peace can be secured on a worldwide scale is a subject of controversy. Some believe that a world peace requires a world government. Others want to proceed by other means. But there is common agreement that peace is not the mere absence of fighting, but a positive order in which the will to settle disputes peaceably prevails.

Contrary to a lot of loose talk, it is peace and not war that is proper to human nature. Cicero and many other thinkers rightly point out that fighting and snarling are the way of brute beasts, while talking things over and listening to reason are the proper way for men. Peace is required not only for our material survival but also for a really human existence.

#20 Can War Be Abolished?

Dear Dr. Adler,

The prophet Isaiah had a vision of a time when "there shall be war no more." Is this a faraway ideal to be achieved when the Kingdom of God comes in, or can we achieve permanent peace now? Will we have to give up our national sovereignty in order to accomplish this? Wouldn't there have to be a complete change in human nature to do away with war?

E. M.

Dear E. M.,

The great thinkers of the past do have some ideas to offer us on the prevention of war. Some of them believe that war can be abolished by world government, which would require giving up part of our national sovereignty. In their view, new institutions are needed, not the widespread moral conversion of men.

Of course, many writers consider the abolition of war neither feasible nor desirable. Machiavelli and Hegel regard war as the most serious business of sovereign states, something that can no more be abolished than national sovereignty can be curtailed. Hegel looks upon war as morally good for nations.

On the other hand, Dante in the Thirteenth century and Kant in the eighteenth argue that world peace is a goal toward which mankind is morally obligated to work. Both think that goal can be achieved only through uniting the nations of the world under a single government based on law and justice. "The morally practical reason," Kant declares, "utters within us its irrevocable veto: There shall be no war." This imperative calls upon all nations to "advance out of lawless state of savages and (enter) into a Federation of Nations."

It it goes no further than the old League of Nations or the present United Nations, a federation of nations does not go far enough. As our own Federalist writers recognized, we must go beyond a loose confederacy to "a more perfect union" if we wish to establish peace among neighboring peoples.

But, you may ask, why is world government the only way to secure world peace? For one thing, because war is the natural state of independent nations. The ancient Greek historian Thucydides and the seventeenth-century English philosopher Hobbes point out that sovereign states are not really at peace with one another when they are not actually fighting.

So-called "peace treaties" do not make peace, Thucydides observes; they only set up armed truces. Sovereign nations, Hobbes remarks, are always at war with one another, either waging the cold war of intrigue and diplomacy or the hot war of steel and shell. "War," says Hobbes, "consists not in battle only or in the act of fighting." It exists wherever men cannot settle their differences without recourse to violence in the last resort.

Peace does not mean the absence of serious conflicts among men. It does not require men to become angels or saints, and live together in perfect brotherly love. Such things will never come to pass on earth. Peace is simply that state of affairs in which men can settle all their differences by talk instead of by force.

This brings us to another reason why world government is the only way to world peace. To substitutue talk for force, government is needed. That this holds true within each nation is clear to the ancient Roman Cicero and the modern Englishman John Locke. Locke says:

> There are two sorts of contests among men, the one managed by law, and the other by force; and these are of such a nature that where the one ends, the other begins.

But to settle human conflicts by law rather than by force, you need a government with the power to make, apply, and enforce laws.

We know that civil peace depends upon civil government--in Chicago, in Illinois, in the United States. Why not the world, then? If local government is necessary for local peace, does it not follow that world government is necessary for world peace?

You may admit that it is necessary, and even theoretically possible; but, you wonder, is it practicable and probably in the near future?

The great thinkers of the past do not give us the answer to that question. They provide us with the principles of clear thinking about the problem, but whether we solve it or not depends on our willingness to think things through and on our resolution to act more wisely in the future than we have in the past. As to whether we will or we won't, your prophecy is as good as mind.

Film-Shorts

The War Game--Contemporary Films--Rental $100
A staged documentary account of the holocaust that nuclear war brings. The film makes one wonder if the peace of death might not be more desirable than the torture of living through such destruction.

The Magician--Sterling Films
An allegorical tale of a magician who lures a group of children through a series of stages from guns used in a shooting gallery to a real life gun battle. The fantasy of childhood is transformed into the desensitivity of a military point of view.

An Occurence at Owl Creek Bridge--Contemporary Films Inc., Rental $17.50
A Confederate soldier is about to be hanged by a Union Platoon. When his body drops into the river from a severed rope, he swims to safety. A series of escape adventures follow and culminate with his standing on his own plantation watching his wife as she hastens to meet him.

As he reaches out for her, we see his body dangling from the original hanging rope. The escape was merely the condemned man's fantasy.

The film begins with the viewer wondering whether the soldier is guilty or innocent, but as the film progresses the desire is the escape of the man and the union with his wife.

Chickamauga--Contemporary Films Inc.--Rental $22.50
A young Union recruit enchanted with war encounters a band of battle-hardened soldiers. There is a clash between fantasy and reality.

The Twisted Cross--Alden Films--$15
A fine documentary tracing the rise and fall of Adolf Hitler and the Nazi Party. Powerful because students cannot question the reality of the film. Very good example of mob psychology.

The Hat: Is This War Necessary?-Indiana Film Library
Two opposing soldiers patrol a border line. The hat of one soldier falls across the border line. The two men spend months debating the issue of the return of the hat. At the close of the film sirens are heard in the background, suggesting that time for debate is running out.

The Neighbors--Contemporary Films Inc.--Rental $6
The special effect of the film creates "people-puppets", who live next to each other in peace and harmony until a flower grows up on the property dividing line. The comedy quickly turns to destruction as they fight over the possession of the flower.

Films-Full Length

Paths of Glory--United Artist

A war weary French regiment is given the goal of taking an impregnable German defensive position. The compassionate and intelligent Colonel realizes the futility of the mission, but is forced to follow the orders of his Division Commander who is motivated by ambition. The Division Commander in turn is under the thumb of a Corps Commander who must placate the French politicians.

After the unsuccessful attack, the Division Commander in an attempt to cover his own inadequacies chooses three innocent men to die as an example of cowardice to the unit. The Colonel courageously defends his soldiers, but to no avail. The men are executed dramatically pointing out the injustice of the situation.

In one of two final scenes the Colonel tells off the Corps Commander. Finally in the last scene the Colonel observes his men moved to tears as a frightened German girl prisoner sings a sad folksong. The film is a fine statement of injustice and human dignity.

Dr. Strangelove--Columbia Cinematheque

The film shows two objectives 1) the inherent danger of American Soviet relations of the 60's, and 2) the foolish, petty, psychotic reasons that propel the characters. Psychotic General Jack D. Ripper an American Air Force Base Commander orders an unauthorized B-52 attack on Russia. The President finds that he is unable to recall the aircraft because only General Ripper knows the special code to recall the planes and he has sealed off his air base.

American paratroops are dispatched to secure the code while the President, via the "hot line," ineffectually explains the situation to the Russian Premier. During the conversation the President finds out that Russia has perfected a "Doomsday Machine," that can be triggered by any nuclear explosion and cannot be detriggered and can destroy the world.

Finally receiving the code, the President recalls all planes, except one because it has defective communications. The President in an attempt to save the world tells the Russians the plane's course and destination; but unknowingly to the U.S., the plane has altered its instructions and heads for an alternative target with its bomb-bay doors open. The film leads to questions about our present defense policies and moral commitments.

The Caine Mutiny--Audio Film Classics

Ensign Willie Keith has in his duty on the USS Caine seen a number of incidents that have convinced him that the commanding officer, Captain Queeg is mentally unbalanced. Based on the proddings of some of his junior officer friends, he decides to relieve the Captain during a typhoon for he fears that the captain will lose the ship. On relieving the captain, he has in effect ordered a Mutiny, which he must defend before a Naval Court Martial.

His lawyer, Lt. Greenwald, in order to save Keith, must destroy Captain Queeg which Greenwald does.

The ultimate winner of the film is the U.S. Navy. But in the film some questions are raised as to the correctness of the mutiny, justice and injustice to subordinates, and the responsibility for decision.

Short Stories

The use of short stories in this unit presents two problems. One is that there are more war novels than war short stories available. Second and probably the biggest problem is that it is virtually impossible to accumulate a group of short stories for students unless a number of anthologies are used and this makes the cost prohibitive.

The best system is to use two or three short stories that are located in the usual run of school anthologies. Two such short stories are: By the Waters of Babylon and The Portable Phonograph.

Two additional paperbacks can be of service; one is James Michener's Tales of the South Pacific; Bantam. The other book attempts to anthologize war, but is currently out of stock (August 1, 1968). It is Man and War ed. M. Jerry Weiss--Dell Publishing Co.

Records

December 7, 1941 -- 1 - 12" -- The New York Times--$4.95.

Edward R. Murrow. A Reporter Remembers: The War Years
2 - 12" -- Columbia Records--$8.75

Sir Winston Churchill: The Sinews of Peace -- 1 - 12"
Spoken Arts, Inc.--$5.95

By the Waters of Babylon

by Stephen Vincent Benét

1. Why is metal so important?
2. What is the "Bitter Water"?
3. Why is the east called the "Place of the Gods"?
4. Why are Priests held in such high regard by the tribe?
5. What does John's dream show him and the reader?
6. How did the giants die?
7. What is John's revelation about the gods?
8. When and where does the story take place?
9. Why didn't the father want John to tell his story to all?
10. What is knowledge? What is wisdom? What is the connection between knowledge and wisdom?
11. Why was Babylon chosen for the title?
12. When was the story written? How might the copyright date show us something about the perceptiveness of the author?

The Portable Phonograph

by Walter Van Tillburg Clark

1. What type of disaster has occured?
2. Why is not the author more explicit about the details of the disaster?
3. Where does the story take place?
4. Why have four men gathered in the dugout?
5. What do we know about their ages, occupations and posts?
6. What is physically wrong with the youngest man?
7. Is the doctor a PH. d or M.D.?
8. Why do you think that there are no women in this story.
9. Why is so much space devoted to a discussion of phonograph, the various needles, and the choice of a record?
10. Why do you think the young man did not wnat to hear the Gershwin piece?
11. How is the Debussy nocture an ironic statement on the whole situation?
12. Contrast the musician's reaction to the music with the reactions of the other men?
13. What is the connection among the four stars, one of them obscurred, a crying wolf, and the suppressed cough.
14. Of what is Jenkins afraid?
15. What is the implication of the lead pipe?
16. What do we learn about Jenkins's personality?
17. What is the author's implication about mankind?
18. Why is the title appropriate?

Comparison of Two Short Stories

1. Why is not either author explicit about the disaster?
2. What is the similiarity in the way the people in each story react to each other?
3. How have ordinary objects of our lives taken on greater value in these stories?
4. Are the characters bitter about what has happened? Why or why not?
5. Is there any hope left for civilization in either story?
6. What message does each author have?
7. How are styles of authors different or similar?

Novels

I. Causes of War
   A. Lord of the Flies, William Golding
   B. Animal Farm, George Orwell
   C. The Mouse That Roared, Leonard Wibberly
      1. Why do novelists satirize man?
      2. What truth, if any, is there to these novels?
      3. How is power used in these novels?
      4. Do these novels show that man is basically good? That man is basically evil?
      5. What are some primary causes for war?
      6. If man cannot get along with his fellow men on an individual level, how can we expect that nations can ever live harmoniously?
      7. If man is imperfect, can there ever be a perfect peace or a perfect world?

II. War Itself
   A. Run Silent, Run Deep, Commander Edward L. Beach
   B. The Bridge Over the River Kwai, Pierre Boulle
   C. P. T. 109, Robert J. Donovan
   D. Sink the Bismarck, C. S. Forester
   E. A Farewell to Arms, Ernest Hemingway
   F. The Bridges at Toko-Ri, James A. Michener
   G. All Quiet on the Western Front, Erich Maria Remarque
   H. The Moon is Down, John Steinbeck
      1. Is war a natural state for man?
      2. Is there a difference between nations at war with each other, and men at war with each other?
      3. Are people of different nations basically different?
      4. Do men in war act differently from men at peace? How? Why?
      5. Does it seem that some men like war?
      6. At the beginning of these novels does any of the characters ever realize the outcome of their war?
      7. Do we tend to romanticize war?
      8. Does anyone ever win wars in these novels?

III. The Results of War
   A. Planet of the Apes, Pierre Boulle
   B. Alas, Babylon, Pat Frank
   C. The Sun Also Rises, Ernest Hemingway
   D. Hiroshima, John Heresy
   E. All My Sons (Play), Authur Miller
   F. 1984, George Orwell
   G. On the Beach, Neville Shute

1. Does war teach man anything of value?
2. Does any good come out of war?
3. The results of war in these novels seems to be death? Is this true in our lives?
4. Is it true, "There never was a good war, or a bad peace."?
5. What similar type of attitude runs through all these books? Why?
6. These books appear to point out that destruction of individual men is as horrible as total destruction of humanity. Why?
7. It seems that finally man has reached a point in his development where he can totally destroy himself. Is this progress?
8. How may the Viet Nam war relate to these books?

Poetry

I. The Man He Killed--by Thomas Hardy

'Had he and I but met
By some old ancient inn,
We should have sat us down to wet
Right many a nipperkin!

"But ranged as infantry,
And staring face to face,
I shot at him as he at me,
And killed him in his place.

"I shot him dead because--
Because he was my foe,
Just so: my foe of course he was;
That's clear enough; although

"He thought he'd 'list, perhaps,
Off-hand-like--just as I--
Was out of work--had sold his traps--
No other reason why.

"Yes; quaint and curious war is!
You shoot a fellow down
You'd treat, if met where any bar is,
Or help to half-a-crown."

II. An Irish Airman Foresees His Death--by William Butler Yeats

I know that I shall meet my fate
Somewhere among the clouds above;
Those that I fight I do not hate,
Those that I guard I do not love;
My country is Kiltartan Cross,
My countrymen Kiltartan's poor,
No likely end could bring them loss
Or leave them happier than before.
Nor law, nor duty bade me fight,
Nor public men, nor cheering crowds,
A lonely impulse of delight
Drove to this tumult in the clouds;
I balanced all, brought all to mind,
The years to come seemed waste of breath,
A waste of breath the years behind
In balance with this life, this death.

III. Danny Deever-by Rudyard Kipling

'What are the bugles blowin' for?" said Files-on Parade.
"To turn you out, to turn you out," the Color-Sergeant said.
"What makes you look so white, so white?" said Files-on Parade.
"I'm dreadin' what I've got to watch," the Color-Sergeant said.
For they're hangin' Danny Deever, you can 'ear the Dead March play:
The regiment's in 'ollow square--they're hangin' him today;
They've taken of his bottons off an cut his stripes away,
An' they're hangin' Danny Deever in the mornin'.

'What makes the rear-rank breathe so 'ard?" said Files-on-Parade.
"It's bitter cold, it's bitter cold," the Color-Sergeant said.
'What makes the front-rank man fall down?" says Files-on-Parade.
"A touch of sun, a touch of sun," the Color-Sergeant said.
They are hangin' Danny Deever, they are marchin' of 'im round.
They 'ave 'alted Danny Deever by 'his coffin on the ground;
An 'e'll swing in 'arf a minute for a sneaking' shootin' hound--
O they're hangin' Danny Deever in the mornin'!

"'Is cot was right-'and cot to mind," said Files-on-Parade.
"'E's sleepin' out an' far tonight," the Color-Sergent said.
"I've drunk 'is beer a score o' times," said Files-on-Parade.
"'E's drinkin' bitter beer along," the Color-Sergeant said.
They are hangin' Danny Deever, you must mark 'im to 'is place,
For 'e shot a comrade sleepin'--you must look 'im in the face;
Nine 'undred of 'is county an' the regiment's disgrace,
While they're hangin' Danny Deever in the mornin'.

'What's that so black agin the sun?" said Files-on-Parade.
"It's Danny fightin' 'ard for life," the Color-Sergeant said.
"What's that that whimpers over'ead?" said Files-on-Parade.
"It's Danny's soul that's passin' now,' the Color-Sergeant said
For they're done with Danny Deever, you can 'ear the quickstep play,
The regiment's in column, an' they're marchin' us away;
Ho! the young recruits are shakin', an' they'll want their beer today,
After hangin' Danny Deever in the mornin'.

IV. Boots--by Rudyard Kipling

We're foot--slog--slog--slog--sloggin' over Africa!
Foot--foot--foot--foot--sloggin' over Africa--
(Boots--boots--boots--boots, movin' up an' down again!)
There's no discharge in the war!

Seven-six--eleven--five--nine-an'-twenty mile today--
Four--eleven--seventeen--thirty-two the day before--
(Boots--boots--boots--boots, movin' up an' down again!)
There's no discharge in the war!

Don't--don't--don't--don't--look at what's in front of you
(Boots--boots--boots--boots, movin' up an' down again!)
Men--men--men--men--men go mad with watchin' 'em,
An' there's no discharge in the war!

Try--try--try--try--to think o' something different--
Oh--my--God--keep--me from goin' lunatic!
(Boots--boots--boots--boots, movin' up an' down again!)
There's no discharge in the war!

Count--count--count--count--the bullets in the bandoliers;
If--your--eyes--drop--they will get atop of' you
(Boots--boots--boots--boots, movin' up an' down again!)
There's no discharge in the war!

We--can--stick--out--'unger, thirst, an' weariness,
But--not--not--not--not the chronic sight of 'em--
Boots--boots--boots--boots, movin' up an' down again,
An' there's no discharge in the war!

'Tain't--so--bad--by--day because o' company,
But night--brings--long--strings o' forty thousand million
Boots--boots--boots--boots, movin' up an' down again.
There's no discharge in the war!

I--'ave--marched''six--weeks in 'Ell an' certify
It--is--not--fire--devils, dark or anything
But boots--boots--boots, movin' up an' down again,
An' there's no discharge in the war!

V. Siegfried Sassoon Poems

A. Attack

At dawn the ridge emerges massed and dun
In the wild purple of the glowering sun
Smoldering through spouts of drifting smoke that shroud
The menacing scarred slope; and, one by one,
Tanks creep and topple forward to the wire.
The barrage roars and lifts. Then, clumsily bowed
With bombs and guns and shovels and battle-gear,
Men jostle and climb to meet the bristling fire.
Lines of gray, muttering faces, masked with fear,
They leave their trenches, going over the top,
While time ticks blank and busy on their wrists,
And hope, with furtive eyes and grappling fists,
Flounders in mud. O Jesu, make it stop!

B. Counter-Attack

We'd gained our first objective hours before
While dawn broke like a face with blinking eyes,
Pallid, unshaved and thirsty, blind with smoke.
Things seemed all right at first. We hold their line,
With bombers posted, Lewis guns well placed,
And clink of shovels deepening the shallow trench.
The place was rotten with dead; green clumsy legs
High-booted, sprawled and groveled along the saps;
And trunks, face downward in the sucking mud,
Wallowed like trodden sand-bags, loosely filled;
And naked, sodden buttocks, mats of hair,
Bulged, clotted heads, slept in the plastering slime.
And then the rain began--the jolly old rain!

A yawning soldier knelt against the bank,
Staring across the morning blear with fog;
He wondered when the Allemands would get busy;
And then of course, they started with five-nines
Traversing, sure as fate, and never a dud.
Mute in the clamor of shells he watched them burst
Spouting dark earth and wire with gusts from hell,
While posturing giants dissolved in drifts of smoke.
He crouched and flinched, dizzy with galloping fear,
Sick for escape,--loathing the strangled horror
And butchered, frantic gestures of the dead.

An officer came blundering down the trench:
"Stand-to and man the fire-step!" On he went. . . .
Gasping and bawling, "Fire-step. . . counter-attack!"
Then the haze lifted. Bombing on the right
Down the old sap: machine guns on the left;
And stumbling figures looming out in front.
"O Christ, they're coming at us!" Bullets spat,
And he remembered his rifle . . . rapid fire . . .
And started blazing wild . . . then a bang
Crumpled and spun him sideways, knocked him out
To grunt and wriggle: none heeded him: he choked
And fought the flapping veils of smothering gloom,
Lost in a blurred confusion of yells and groans . . .
Down, and down, and down, he sank and drowned,
Bleeding to death. The counter-attack had failed.

C. Dreamers

Soldiers are citizens of death's gray land,
    Drawing no dividend from time's tomorrows.
In the great hour of destiny they stand,
    Each with his feuds, and jealousies, and sorrows.
Soldiers are sworn to action; they must win
    Some flaming, fatal climax with their lives.
Soldiers are dreamers; when the guns begin
    They think of firelit homes, clean beds, and wives.

I see them in foul dug-outs, gnawed by rats,
    And in the ruined trenches, lashed with rain,
Dreaming of things they did with balls and bats,
    And mocked by hopeless longing to regain
Bank-holidays, and picture shows, and spats,
    And going to the office in the train.

D. Does it Matter?

Does it matter?--losing your legs? . . .
For people will always be kind,
And you need not show that you mind
When the others come in after hunting
To gobble their muffins and eggs.

Does it matter?--losing your sight? . . .
There's such splendid work for the blind;
And people will always be kind,
As you sit on the terrace remembering
And turning your face to the light.

Do they matter?--those dreams from the pit? . . .
You can drink and forget and be glad,
And people won't say that you're mad;
For they'll know that you've fought for your country,
And no one will worry a bit.

E. Aftermath

Have you forgotten yet? . . .
For the world's events have rumbled on since those gagged days,
Like traffic checked a while at the crossing of city ways:
And the haunted gap in your mind has filled with thoughts
    that flow
Like clouds in the lit heavens of life; and you're a man
    reprieved to go,
Taking your peaceful share of Time, with joy to spare.
But the past is just the same,--and War's a bloody game. . .
Have you forgotten yet? . . .
Look down, and swear by the slain of the War that you'll
    never forget.

Do you remember the dark months you held the sector at
    Mametz,--
The nights you watched and wired and dug and piled sand-bags
    on parapets?
Do you remember the rats; and the stench
Of corpses rotting in front of the front-line trench,--
And dawn coming, dirty-white, and chill with a hopeless rain?
Do you ever stop and ask, "Is it all going to happen again?"

Do you remember that hour of din before the attack,--
And the anger, the blind compassion that seized and shook
    you then
As you peered at the doomed and haggard faces of you men?
Do you remember the stretcher-cases lurching back
With dying eyes and lolling heads, those ashen-gray
Makes of the lads who once were keen and kind and gay?

Have you forgotten yet? . . .
Look up, and swear by the green of the Spring that you'll
    never forget!

VI. Wilfred Owen Poems

A. Anthem for Doomed Youth

What passing-bells for these who die as cattle?
Only the monstrous anger of the guns.
Only the stuttering rifles' rapid rattle
Can patter out their hasty orisons.
No mockeries for them; no prayers nor bells,
Nor any voice of mourning save the choirs,--
The shrill, demented choirs of wailing shells;
And bugles calling for them from sad shires.

What candles may be held to speed them all?
Not in the hands of boys, but in their eyes
Shall shine the holy glimmers of good-bys.
The pallor of girls' brows shall be their pall;
Their flowers the tenderness of patient minds,
And each slow dusk a drawing-down of blinds.

B. Dulce Et Decorum Est

Bent double, like old beggars under sacks,
Knock-kneed, coughing like hags, we cursed through sludge,
Till on the haunting we turned our backs,
And towards our distant rest began to trudge.
Men marched asleep. Many had lost their boots,
But limped on, blood-shod. All went lame, all blind;
Drunk with fatigue; deaf even to the hoots
Of gas-shells dropping softly behind.
Gas! Gas! Quick, boys!--An ecstasy of fumbling,
Fitting the clumsy helmets just in time,
But someone still was yelling out and stumbling
And flound'ring like a man in fire or lime.
Dim through the misty panes and thick green light,
As under a green sea, I saw him drowning.

In all my dreams before my helpless sight
He plunges at me, guttering, choking, drowning.

If in some smothering dreams, you too could pace
Behind the wagon that we flung him in,
And watch the white eyes wilting in his face,
His hanging face, like a devil's sick of sin,
If you could hear, at every jolt, the blood
Come gargling from the froth-corrupted lungs
Bitten as the cud
Of vile, incurable sores on innocent tongues,--
My friend, you would not tell with such high zest
To children ardent for some desperate glory,
The old lie: Dulce et decorum est
Pro patria mori.[1]

1. "It is sweet and dignified to die for one's country."

C. The Unreturning

Suddenly night crushed out the day and hurled
Her remnants over cloud-peaks, thunder-walled.
Then fell a stillness such as harks appalled
When far-gone dead return upon the world.

There watched I for the Dead; but no ghost woke.
Each one whom Life exiled I named and called.
But they were all too far, or dumbed, or thralled;
And never one fared back to me or spoke.

Then peered the indefinite unshapen dawn
With vacant gloaming, sad as half-lit minds,
The weak-limned hour when sick men's sighs are drained.
And while I wondered on their being withdrawn,
Gagged by the smothering wing which none unbinds,
I dreaded even a heaven with doors so chained.

[1] "It is sweet and dignified to die for one's country."

D. The Show

My soul looked down from a vague height with Death,
As unremembering how I rose or why,
And saw a sad land, weak with sweats of dearth,
Gray, cratered like the moon with hollow woe,
And fitted with great pocks and scabs of plagues.

Across its beard, that horror of harsh wire,
There moved thin caterpillars, slowly uncoiled.
It seemed they pushed themselves to be as plugs
Of ditches, where they writhed and shrivelled, killed.

By them had slimy paths been trailed and scraped
Round myriad warts that might be little hills.
From gloom's last dregs these long-strung creatures crept,
And vanished out of dawn down hidden holes.

(And smell came up from those foul openings
As out of mouths, or deep wounds deepening.)

On dithering feet upgathered, more and more,
Brown strings towards strings of gray, with bristling spines,
All migrants from green fields, intent on mire.
Those that were gray, of more abundant spawns,
Ramped on the rest and ate them and were eaten.
I saw their bitten backs curve, loop, and straighten,
I watched those agonies curl, lift, and flatten.

Whereat, in terror what that sight might mean,
I reeled and shivered earthward like a feather.
And Death fell with me, like a deepening moan.
And He, picking a manner of worm, which half had hid
Its bruises in the earth, but crawled no further,
Showed me its feet, the feet of many men,
And the fresh-severed head of it, my head.

VII. Grass--by Carl Sandburg

Pile the bodies high at Austerlitz and Waterloo.
Shovel them under and let me work--
I am the grass; I cover all.

And pile them high at Gettysburg
And pile them high at Ypres and Verdun.
Shovel them under and let me work.
Two years, ten years, and passengers ask the conductor:
What place is this?
Where are we now?

I am the grass.
Let me work.

VIII. *The Leg*--by Karl Shapiro

Among the Iodoform, in twilight-sleep,
What have I lost? he first inquires,
Peers in the middle distance where a pain,
Ghost of a nurse, hastily moves, and day,
Her blinding presence pressing in his eyes
And now his ears. They are handling him
With rubber hands. He wants to get up.

One day beside some flowers near his nose
He will be thinking, When will I look at it?
And pain, still in the middle distance, will reply
At what? and he will know it's gone,
O where! and begin to tremble and cry.
He will begin to cry as a child cries
Whose puppy is mangled under a screaming wheel.

Later, as if deliberately, his fingers
Begin to explore the stump. He learns a shape
That is comfortable and tucked in like a sock.
This has a sense of humor, this can despise
The finest surgical limb, the dignity of limping,
The nonsense of wheel-chairs. Now he smiles to the wall:
The amputation becomes an acquisition.

For the leg is wondering where he is (all is not lost)
And surely he has a duty to the leg;
He is its injury, the leg is his orphan,
He must cultivate the mind of the leg,
Pray for the part that is missing, pray for peace
In the image of man, pray, pray for its safety,
And after a little it will die quietly.

The body, what is it, Father, but a sign
To love the force that grows us, to give back
What in Thy palm is senselessness and mud?
Knead, knead the substance of our understanding
Which must be beautiful in flesh to walk,
That if Thou take me angrily in hand
And hurl me to the shark, I shall not die!

IX. The Charge of the Light Brigade--by Alfred Lord Tennyson

Half a league, half a league,
Half a league onward,
All in the valley of Death
Rode the six hundred.
"Forward, the Light Brigade!
Charge for the guns!" he said.
Into the valley of Death
Rode the six hundred.

"Forward, the light Brigade!"
Was there a man dismayed?
Not though the soldier knew
Someone had blundered.
Theirs not to make reply.
Theirs not to reason why,
Theirs but to do and die.
Into the valley of Death
Rode the six hundred.

Cannon to right of the,
Cannon to left of them,
Cannon in front of them
Volleyed and thundered;
Stormed at with shot and shell.
Boldly they rode and well,
Into the jaws of Death,
Into the mouth of Hell
Rode the six hundred.

Flashed all their sabers bare,
Flashed as they turned in air
Sabring the gunners there,
Charging an army, while
All the world wondered:
Plunged in the battery smoke
Right through the line they broke;
Cossack and Russian
Reeled from the saber stroke
Shattered and sundered.
Then they rode back, but not,
Not the six hundred.

Cannon to right of them,
Cannon to left of them,
Cannon behind them
Volleyed and Thundered;
Stormed at with shot and shell,
While horse and hero fell,
They that had fought so well
Came through the jaws of Death,
Back from the mouth of Hell,
All that was left of them,
Left of six hundred.

The Charge of the Light Brigade (continued)

When can their glory fade?
O the wild charge they made!
    All the world wondered.
Honor the charge they made!
Honor the Light Brigade,
    Noble six hundred!

X. The Death of the Ball Turret Gunner--by Randall Jarrell

From my mother's sleep I fell into the State,
And I hunched in its belly till my wet fur froze.
Six miles from earth, loosed from its dream of life,
I woke to black flak and the nightmare fighters.
When I died they washed me out of the turret with a hose.

UNIT FIVE

LEISURE TIME ACTIVITIES

I. Travel
II. Restaurants
III. Legitimate Theater
IV. Motion Pictures
V. Civic Responsibility
VI. Projects

As unions achieve a reduction of the work week, there is a corresponding benefit of additional leisure time for workers. Research shows that workers use their free time in activities around the house and in the local community. This unit suggests some ideas for leisure time to those already engaged in by workers. These additional activities tend to strengthen the cultural, educational,and community service aspects of leisure time activities. Also considered in these suggestions is the responsibility that a person has in expanding the horizons of his children. This unit's goal is that the awareness of ideas in adolescence can be of value and of use in adulthood.

Leisure Time Activities

- I. Travel
  - A. Means of Travel
    - 1. Air
      - a. fastest over long distances
      - b. special rates for students
      - c. may prove difficult to reach airports
      - d. reservations may be difficult to make on certain trips
      - e. luggage limit

    - 2. Bus
      - a. convenient to home
      - b. inexpensive
      - c. slow
      - d. depots inside cities

    - 3. Train
      - a. not a popular means of travel
      - b. not direct
      - c. depots inside cities

    - 4. Automobile
      - a. convenient
      - b. inexpensive
      - c. little planning necessary

    - 5. Boat
      - a. very slow
      - b. not usually used solely for transportation
      - c. excursion trip
      - d. leisurly
  - B. Places to Visit
    - 1. Foreign
      - a. expensive
      - b. planning necessary
      - c. time element involved
      - d. Canada very convenient to car
      - e. Mexico can be reached by car
      - f. passports
      - g. health procedures

    - 2. United States
      - a. least amount of planning
      - b. convenient to travel
      - c. relatively inexpensive
      - d. short daily trips in local area are possible
        - 1. parks and beaches
        - 2. historical places
        - 3. museums
        - 4. concerts
        - 5. sight seeing

- C. Lodging
  - 1. Motels
    - a. convenient to highways
    - b. built with car in mind
    - c. usually modern
    - d. majority located in outskirts of town

  - 2. Hotels
    - a. usually older structures
    - b. located inside cities
    - c. may present parking problems

- D. Travel Assistance Agencies
  - 1. Oil Companies
    - a. free information provided
    - b. maps and routes
    - c. impersonal

  - 2. Automobile Association of America (A.A.A.)
    - a. small membership fee
    - b. maps and routes
    - c. international organization
    - d. provides insurance coverage
    - e. personal assistance
    - f. assists in making arrangements
    - g. provides highway help for disabled car

  - 3. Travel Agencies
    - a. assists in arranging for public transportation
    - b. responsible for arranging trip
    - c. located in local area
    - d. usually no fee attached
    - e. private profit-making organization
    - f. very personal
    - g. everything packaged

  - 4. Newspaper Travel Sections
    - a. much advertising
    - b. advice by reporters

  - 5. Chambers of Commerce
    - a. advertises local area
    - b. free advice

  - 6. Federal Government--U.S. Printing Office
    - a. Federal Facilities
      - 1. camp grounds
      - 2. national parks
      - 3. historical monuments
    - b. inexpensive facilities

  - 7. Travel Books

E. Conveniences
  1. Traveler's Checks
    a. $1/$100
    b. safety
    c. service provided by banks

  2. Credit Cards
    a. very convenient
    b. oil companies provide cards free of charge
    c. some cards demand small service charge and fee
    d. usually good for restaurants and lodging

  3. Eating Places
    a. American plan
    b. European plan

II. Restaurants
  A. Types
    1. American
      a. steaks
      b. seafood
    2. Chinese
    3. French
    4. German
    5. Italian
    6. Japanese
    7. Kosher
    8. Mexican-Spanish
    9. Scandanavian

  B. How to Find a Restaurant
    1. local newspapers
      a. advertisements
      b. dining editors

    2. Cue magazine
      a. ratings
      b. listings
      c. advertisements

    3. Books on Dining
    4. A.A.A. listings

  C. Entering a Restaurant
    1. reservations
    2. host-hostess-headwaiter
    3. seating
    4. menus

  D. Ordering
    1. a la carte--probably more expensive
    2. table d'hote
      a. drinks
      b. appetizer
      c. soup
      d. salad
      e. entrée
      f. dessert

E. Table Settings
   1. silverware
   2. glassware
   3. china

F. Waiter
   1. lends assistance when ordering
   2. check
   3. tipping

III. Legitimate Theater
   A. What's Playing and Where?
      1. ABC listings in newspapers--*N.Y. Times* is most complete
         a. title of show
         b. stars
         c. director
         d. author
         e. prices
            1. orchestra
            2. mezzanine
            3. balcony
         f. address of theater and phone number
         g. blurbs from reviews or awards

      2. Advertisements in entertainment section
      3. Magazines
         a. *Cue*
         b. *The New Yorker*

      4. Billboards
      5. Television

   B. Types of Shows
      1. Drama
      2. Comedy
      3. Musical

   C. Centers of Theater Activity
      1. Broadway--41st Street to 52nd Street between 8th Avenue and 6th Avenue in Manhattan
      2. Off-Broadway--Greenwich Village Area, group of theaters in Seventies on East Side of Manhattan
      3. Lincoln Center

   D. What is Show About?
      1. ABC listing
      2. One paragraph synopsis in newspapers or magazines

3. Reviews--extended criticism of show
    a. appear in newspapers the day after a show opens
    b. appear in magazines the week after the show opens
    c. review is the opinion of one knowledgeable person
    d. major newspapers, magazines each have a different reviewer
    e. make-up of newspaper reviews
        1. plot of show
        2. opinion of major aspects of show
        3. overall opinion of reviewer
        4. concrete examples of parts of show
    f. magazine reviews are shorter and more general

4. Publishment of plays
    a. in book form
    b. in magazines

5. Musical plays have original cast recordings
6. Playbill issued at theater
    a. gives necessary information
    b. articles about the theater in general

7. Three minute reviews on television during news broadcasts.

E. Tickets
    1. Dates and Time
        a. Monday - Saturday evenings at 8:30 p.m.
        b. Wednesday matinee at 2:00 p.m.
        c. Saturday matinee at 2:30 p.m.

    2. Matinees are usually less expensive
    3. Advance sale is advised for shows are usually sold-out weeks in advance.
    4. Tickets can be purchased at the theater box-office at face value.
    5. Tickets can be purchased at ticket agencies for a service charge.
    6. Two-fers and student discount tickets
        a. price of show is cut about in half
        b. these tickets can be picked up at some high schools and almost all colleges
        c. usually are for shows that will be closing shortly
    7. U.S.O.--for Armed Forces only
        a. Broadway and 42nd Street
        b. free tickets to Broadway plays are given out about one-half hour before show time

- IV. Motion Pictures
  - A. What is Playing and Where?
    - 1. Display advertisements in newspapers
      - a. title of show
      - b. stars
      - c. producer
      - d. director
      - e. music
      - f. company
      - g. address of theater and phone number
      - h. times of showing

    - 2. Magazines
      - a. *The New Yorker*--New York City
      - b. *Cue*--All theaters in New York--New Jersey Metropolitan Area

    - 3. Billboards
    - 4. Television
    - 5. Previews of coming attractions

  - B. Attendance at Theaters
    - 1. Tickets
      - a. usually easy to purchase
      - b. usually one or two prices
      - c. Saturday night usually heavy attendance
      - d. New York City has many different theaters showing new releases

    - 2. Saturation showing--one film at many theaters at one time.
    - 3. Privileged showing--one film at one theater at one time.
    - 4. Age Bracket
      - a. 52 percent under age twenty
      - b. 72 percent under age thirty

  - C. Types of Theaters
    - 1. neighborhood
    - 2. shopping center
    - 3. drive-ins
    - 4. art

  - D. Types of Films
    - 1. color or black and white
    - 2. size
      - a. Standard size - 1:33
      - b. Vista Vision - 1:75
      - c. Cinerama - 2:00
      - d. Todd A-O - 2:00
      - e. Cinemascope - 2:33
      - f. Panavision - 2:33

    - 3. new or revival

E. What is Film About?
   1. Display advertisements
   2. synopsis in newspapers
   3. capsule reviews in *Cue*
   4. major reviews
      a. day after show opens in New York
      b. day after show opens in local area
      c. appears in magazines one week after the film premieres
      d. make-up is similiar to play review
   5. major spreads by magazines
   6. recording of sound track

F. Censorship
   1. Motion Picture Production Code of the Motion Picture Association of America, Inc.
      a. crime
      b. brutality
      c. sex
      d. vulgarity
      e. obscenity
      f. blasphemy and profanity
      g. costumes
      h. religion

   2. "Recommended for Mature Audiences"
   3. Community Censorship

G. Selection of Movies
   1. Stars
      a. personal opinions
      b. personal behavior
      c. talent
      d. attributes that make him a star

   2. theme
   3. advertising
   4. previews
   5. nothing-else-to-do-concept

Civic Responsibility

I. General Types
   - A. Political
   - B. Athletic
   - C. Religious
   - D. Cultural
   - E. Charitable
   - F. Business and Professional
   - G. Civic
   - H. Civil Rights
   - I. Educational
   - J. Fraternal

II. Local Organizations--These organizations have assistance to people as one of their objectives. Many organizations cut-across type lines and are primarily listed as a means for research and reference. Listing is according to similarity of purpose.
   - A. Republicans and Democrats
   - B. Youth Guidance Council
   - C. YMCA, YWCA, YMHA
   - D. Community Chest, Red Cross, Heart Fund, March of Dimes
   - E. Chamber of Commerce, Junior Chamber of Commerce
   - F. Kiwanis, Optimists, Rotary, Lions
   - G. Hospital Volunteers, Volunteer Ambulance, Auxillary Police
   - H. Parent-Teacher Association
   - I. Elks, Moose, Masons, Knights of Columbus
   - J. American Legion
   - K. Women's Club, Colony Club, Zonta

Suggested Projects

1. Have students choose a movie or play they would like to see following the guide set-up for such a procedure and plan a field trip.

2. Have students simulate planning of a trip to a distant place by public transportation. Arrange for a travel agent to come in and actually show them procedures and problems that must be met in planning a trip.

3. Have students arrange to have a dinner party in a local restaurant. Arrange with the owner to take students behind the scenes in the running of a restaurant.

4. Have students prepare a brochure of city civic organizations. Some questions to be answered are:
    a. name
    b. address
    c. officers
    d. purpose
    e. programs currently sponsored
    f. past accomplishments
    g. how people can be of service to organization
    h. publications of organization

BIBLIOGRAPHY

I. Books

1. Adler, Mortimer J.; Great Ideas From the Great Books, Washington Square Press, Inc., New York, New York, 1966.

2. Kierzek, John M.; The MacMillan Handbook of English Third Edition, The MacMillan Co., New York, New York, 1954.

3. Lindgren, Ernest; The Art of the Film, the MacMillan Co., New York, New York 1963.

4. Macelli, Joseph V.; The Five C's of Cinematography, Cine/Grafic Publications, Hollywood, California, 1965.

5. Mitchell, John; Handbook of Technical Communication, Wadsworth Publishing Co. Inc., Belmont, California, 1962.

6. Stewart, Lanham, Zimmer; Business English and Communication, Gregg Division, McGraw-Hill Book Company, New York, New York, 1967.

7. Stewart, Lanham Zimmer; College English and Communication, Gregg Division, McGraw-Hill Book Company, New York, New York, 1964.

8. Styan, J. L.; The Dramatic Experience, Cambridge University Press, London, England, 1965.

9. Untermeyer, Louis; Modern American Poetry, Harcourt Brace and World, Inc., New York, New York, 1962.

10. ________________ ; Modern British Poetry, Harcourt Brace and World, Inc., New York, New York, 1950.

11. Ward, Herman; Poems for Pleasure, Hill and Wang, New York, New York, 1962.

12. Warriner, John E.; English Grammar and Composition - Complete Course, Harcourt Brace and Company, Inc., New York, New York, 1957.

II. Pamphlets, Periodicals, and Yearbooks

1. The Mass Media in Secondary Education, Miller, Jerome, ed., 1965 Yearbook, N. J. Secondary School Teachers Association

2. Media and Methods, McLaughlin, Frank, ed., 134 North 13th Street, Philadelphia, Pa., September 1966 - May 1968.

3. Your Job Interview, New York Life Insurance Co., New York, New York.

Occupational Relations

GENERAL INTRODUCTION

The following units for classroom use are designed to provide students with a clearer understanding of the reasons for their behavior and attitudes toward various types and groups of people with whom they will come in contact during their working life. The premise for this study is that frequently in job settings, just as in familial and social ones, there occur incidents or even a climate of strained, abrasive or outrightly hostile interpersonal behavior that could conceivably have been avoided if the persons involved had used a more rational basis for their actions or had a clearer insight into their motives for it. With recent developments in the whole field of personnel relations in industry, it has become increasingly evident that much of the friction that occurs between various personality types and/or groups of people is the result of unconsciously irrational decisions based on assumptions, half-truths and distortions of all kinds. Often, they are largely a result of those who hold them having had little or no real experience with the persons or groups in question, hence no understanding of their special problems or feelings.

The techniques that are used in these units are designed to overcome or at least challenge the mode of thinking described above. In each case, the student begins with his present perspectives and decision making patterns and, through interaction with a group, is forced to test these attitudes against the reality of the situation which in many cases, will be presented to him by the very people who have been the object of his prejudices. This type of involvement (as opposed to simply being told how to think) it is believed, offers a maximum potential for self discovery and as such approximates more closely a real-life environment. In the process it is hoped that the student will at least begin to question the pattern through which he has, in the past, formed his judgements and made his decisions concerning people.

SAMPLE UNIT I: Interpersonal Relations on the Job

SECTION I: Decision Making

METHODS: Group Discussion

Problem Solving

OBJECTIVES -To provide a greater sensitivity to some of the problems of interpersonal relations on the job.

-To increase insight into the mental process through which we make judgements about people.

-To offer a practical exercise in decision making.

I. Introducing the Unit

A. Motivation

1. Explain to the group that the upcoming unit of work is intended to deal with the subject of interpersonal relations on the job. Discuss and define the term interpersonal relations with them.
2. Ask them whether, in the course of their work experiences, they have ever observed or been involved in a situation in which friction or hostility developed between employees on the job. Give them a few minutes to think about this and to recall the details of the situation.

3. Ask whether anyone would like to describe in some detail the circumstances of the conflict he has experienced and its outcome. Hopefully, there will be a number of students who will volunteer to describe an experience such as this. Tell the rest to listen carefully to each of these cases and to try to recall the essentials of it. .
4. Once a sufficient number of these "case studies" have been offered, ask the students whether they see any similarities in these cases particularly in the causes for them and could make a general statement that might apply to several or all of them. In a fairly typical group the cases given, hence the comments on them, will contain such ideas as--supervisors being out of sympathy with their subordinates' problems, antogonism between groups or individuals, poor working conditions, poor judgement being exercised by supervisors, lack of communication between workers, etc.
5. After these suggestions have been made and discussed, ask the students whether they think that in most cases workers want to get along well well with each other. The answer to this will obviously be that they do. If asked to state why this is true, the students will almost certainly respond that such harmony on the job makes the work day easier and more enjoyable.

6. At this point suggest to the groups that if people working together basically want to get along but often don't the reason might lie in a behavior pattern that causes hostility or friction without the individual intending it to or realizing that it will. Suggest further that people in job environments are continually being called on to form judgements and make decisions about other people--their subordinates, supervisors, co-workers, customers, etc. Suggest that perhaps some of the problems that arise might be traceable to the mental process through which these decisions and judgements are made and for this reason it might be worthwhile considering this process and how it functions.

II. Problem Solving Exercise

A. Introduction

1. Point out to the group that our behavior toward other people--in other words, what we display to them through our words and actions--is really the end result of the judgements we form about them or the conscious and unconscious decisions we make about them. Explain further that these decisions are the result of many influences that we are subjected to in our lives. Suggest that these influences might be divided into internal and external influences. Ask the students for suggestions of what they think are some of the internal

factors that influence our judgements. Their suggestions should include our prejudices or preferences for certain personality types, racial, social and religious groups, etc. Also included in this could be our own temperament or personality, self-image, etc. External influences might include the various pressures we experience from co-workers, supervisors, or subordinates, and problems that we carry over from our roles in the family or society.

2. When the preceding points have been discussed adequately, explain to the group that the next part of the unit will involve some thinking about a problem situation in which a decision must be made by an office supervisor of which of two girls to hire for a job opening. Explain to them that the details of the problem will be given to them on a mimeographed sheet, that they are to read the problem carefully and, putting themselves in the supervisors place, make the decision that they think would work out best for the company and the employees who will be affected by it. Tell them that they will have an opportunity to offer their final decisions and their reasons for making it as soon as everyone has had a sufficient time to think about the problem. Explain that their reasons should be as logical as they can make the. At this point,

distribute copies of the sample problem on the following page.

Sample Problem

The supervisor of a section containing ten female clerical workers has been told that the new budget allows for one additional girl in his section. The personnel department informs him soon after that two girls have been found who seem to have equal qualifications for the job and that he may make the final choice of which to hire. The information on their applications reveals that one of the girls is Negro, the other white. The white girl is eighteen and a recent high school graduate. The Negro girl has also graduated recently although she is now twenty years old. She has graduated at a later age because she left school for a year and a half during which time she got married and had a child. She returned to finish school after separating from her husband.

The department at present is made up of girls who have either graduated from high school recently or are working part time while still attending. The jobs in the section are all fairly low skill jobs and the rate of pay is not very high.

For purposes of discussion, the Negro girl will be called Joyce, the white girl, Ellen.

The Supervisors Decision:

After making the following considerations, the supervisor chose Ellen for the position. He reasoned first of all that with a child to look ater Joyce would be forced to miss time at work frequently. Secondly, Joyce's cultural background and experiences would give her little in common with the other girls and make her uncomfortable with them and vice-versa. Further it might not be a good thing for the younger girls particularly to have to associate with a person of her experience, etc. Finally, it seemed apparent to him that Ellen would be the more intelligent and industrious worker.

B. Problem Analysis and Decision--Stage I

1. When the group has had sufficient time to consider the problem (an overnight assignment is advisable for this.) and reach a decision, begin the discussion. First, let them offer their individual choices and reasons. As they do this, start compiling a list of these reasons on the board. When all of them have been given, tell them that they may offer opinions, if they wish, of the ideas on the board. Encourage as much of an exchange of opinions as possible without any evaluation on your part. In the course of this discussion the group may agree that certain reasons are not good and should be altered or stricken off. Do whatever they direct you to do. Continue to encourage the discussion until some kind of consensus or majority viewpoint has emerged from the group. For the sake of example, it might be helpful here to suggest that some of the consenus reasons might be as follows:

   - Ellen will have more in common with the other girls in the office and therefore get along better with them.
   - The presence of a Negro in the office will be awkward and distracting.
   - Joyce will miss time at work because she has the child to care for.
   - etc.

The consensus will likely be that Ellen is the better choice for the job.

2. At this point tell the group that they will now be given descriptions of the supervisors decision and his reasons for it which they will be able to compare with their own. Tell them that the next segment of the unit will require some further thinking on this problem in the form of an analysis and evaluation of the decision described on page numbered.

3. When the group has had sufficient time to study the supervisor's decision along with their own, ask them whether they still think that the reasoning behind them is intelligent and logical. If their replies show some hesitancy, as will likely be the case, ask the students whether they know the difference between a _fact_, an _inference_, and an _assumption_. Through discussion the following definitions might be arrived at:

   A fact is any thing, condition, or event that can be proven _true_ and _real_ through direct observation or experience, or on the basis of a reliable historical source.

   An inference is a conclusion which a person draws from certain observed or supposed facts.

   An assumption is something supposed or taken for granted.

Give examples for these definitions to make them clear. Emphasize the idea that assumptions are ideas formed from little or no real experience, in other words, almost pure guesswork. Emphasize also that if an inference is to be an intelligent one it must be based on as many facts as are available. Point out that good decisions are based on the latter process whereas unintelligent ones are based on assumptions, or inferences drawn from too few facts or things mistaken for facts.

4. Once they understand these ideas it should be possible for them to analyze the decisions they made as being based largely on assumptions or on inferences with very little factual support. They should also be able to see that these assumptions were influenced largely by feelings of racial bias on the part of the supervisor or, in the case of their consenus decision, on their own part. The supervisor was influenced by his fear of contaminating the morals of the younger white girls and of causing an awkward social situation in the office, both of which he assumed would happen. His racial feeling also led him to believe that the Negro girl was inherently less intelligent and would be less diligent as a worker. A further assumption was that the Negro girl would be forced to take time from the job to care for her child.[12]

C. Problem Analysis and Decision --Stage II

1. At this point if the group sees the flaws in the thinking which led to the first decision, ask them what steps could have been taken to insure a better one having been made. The answer should be that more facts should have been found and used in drawing the inferences and that the erroneous assumptions should have been avoided. Tell the group that, in view of this, the next logical exercise should be for them to place themselves once again into the supervisor's role and assume that they have the opportunity to learn more about the girls. Tell them that you will provide an answer for every question asked about the girls and that they may accept your answers as fact. Point out that the questions should be related to such considerations as the following:

   - How interested or sincere will the girl be regarding the job, a good indication of this being how much the job will mean to her.
   - How capable will she be in learning and performing the work.
   - Will she be likely to miss much time due to conflicting outside interests of any kind?
   - How long will she be likely to stay with the company?
   - How will she get along with the other workers personally?

2. Through this exercise you have the opportunity to provide a body of facts that can lead to a clear cut decision of a sounder variety than was arrived at the first time around. To this end, the answers you give should provide a clear balance in favor of the Negro girl. Design the answers to produce a portrait of the white girl as being basically nice and intelligent, but one for whom the job means little in terms of either money or career ambitions. Indicate also that although she would probably make a good worker she is not likely to stay with the company for long. On the other hand, provide a portrait of the Negro girl as one to whom the job means more both financially and as an opportunity. Dispell the notion that her presence in the office will cause any friction or embarrassment. Make it clear that she will not have to miss time in order to care for her child. Finally, all answers related to the intelligence or capabilities and training background of the girls should be designed to indicate their equality as candidates.

3. Once the students have been given enough facts upon which to base another decision, have them repeat the process used in arriving at the first one. If the unit up till now has been effective the group will be able to make a more intelligent

decision and, perhaps more important, understand the difference between the thought processes which produced the two decisions.

Note:

One further bit of explanation should be included here for teachers of this unit. At the stage of the unit just after the students have made their first decision concerning the hiring of the girl, the teacher has a choice of directions to follow. If the class consensus is similar to the decision made by the supervisor in number sample this will provide an adequate basis for proceding with the further discussion. In this case it is not necessary to include the supervisors decision. Simply proceed on the basis of the students' consensus decision. The supervisor's decision has been included primarily to provide a basis for the further steps of the unit in case the group's reaction in inadequate or would lead in an undesired direction.

SECTION II Intergroup Relations

METHOD Role Playing

OBJECTIVES- To provide a greater sensitivity to some of the problems of interpersonal relations on the job.

- To develop a capacity for empathy for the role of others within the group.
- To increase insight into our own role within the group.
- To offer a practical experiment in group relations.

I. General Description and Rationale for Role Playing

A. Background

1. In recent years an instructional technique known as "role playing" has developed into one of the most widely used and successful methods of teaching people the skills of human relations through actual practice in a laboratory situation. It has been used with excellent results in a wide variety of areas ranging from the business world to social and psychological rehabilitation programs until now it has become one of the standard educational devices. Through several of its adaptations, notably "socio-drama" and "psycho-drama" it has gained wide notice outside the academic or business spheres and has even made a considerable impact in the field of avant-garde theater. More

and more, it is coming to be accepted as one of the most logical and potent methods for giving people more than a merely superficial grasp of what it means to be someone else or, indeed, what it means to be oneself.

B. Description

1. Role playing is just what its name implies. A situation containing a human-relations problem is described, the characters involved in it are identified, and members of the class are assigned to the various roles, acting out the role delineated by the character description and composing their lines as they go along. The scene is played out until the problem is solved or, in other instances, until the participants have had an opportunity to gain some degree of empathy or insight into the person whose role they have adopted. At this point the audience and actors together discuss what has taken place in an attempt to draw some meaning from it for their actual life experiences.

C. Rationale

1. The principle value of role playing as a means of understanding human relations is that it provides an opportunity for the participants to experience in a much more real way than is possible through reading or discussion, the problems inherent in someone else's role in society, business, school, etc. Certainly this is one of the most difficult

things to learn and even more so, to teach. For example, how can the lower level worker empathize with the problems of the supervisor, or the white worker with the Negro without having some actual experience with them. Obviously, role playing can never provide the same quality experience as does a life situation. But by its very nature, this practice comes closer to the life experience than do so many other educational practices. At the very least, it offers the rewards of learning through trial and error without the harms that often results when people must learn this way in their actual lives.

II. The Role-Playing Method

A. General Principles

1. For the role-playing episode to be effective the instructor must have a clear idea of what he wants to accomplish. Broad or vague objectives which merely point to a general area of human relations to be attacked are unsatisfactory. They will lead to a role-playing episode in which the students simply think up clever lines or try to entertain the audience rather than working toward the solution or elucidation of a problem. Consider, for example, the difference between the two following objectives:

   - To show how misunderstanding can arise between Negro and white workers on the job.

- To show how a series of rumors and assumptions can lead to a breakdown in relations between Negro and white workers on the job.

Obviously, the first objective is vague and gives those playing the roles very little to start with. The second, however, gives the characters a framework for developing the scene and a guide to the direction it should take. Whether it be a specific cause for a problem or a specific skill in handling one, the objectives for role playing unit must be clearly defined and understood by all involved.

B. Designing the Situation

1. There are several approaches to the composition of the type of scene or situation to be acted out. One of these is for the instructor (or group of instructors) to design on their own, the situation that they think will best suit the objectives they wish to achieve. This method has two chief advantages:
    - It offers the best guarantee that the episode will be suited to the precise objectives of the instructor.
    - If there is a limited amount of time to be spent on the unit, this approach avoids the more time consuming practice of a group consensus or group design of the situation.

At times, however, it might be more profitable to draw on the knowledge, experience, and inventiveness of the students in the episode. There are two important advantages in this approach:

- The students may have more actual experience with the type of work environment in which episode is to be set. This will result in a more realistic situation being created.
- The students will probably feel greater sense of involvement in the preceedings.

Whichever approach is decided upon, the following measures should be taken.

- Structure the situation to fit a specific learning outcome you want to produce.
- Makes the situation resemble one that the students might actually find in their working lives. Keep it believable.
- Describe the situation in enough detail for everyone to envision the same circumstances surrounding it and to understand the problem it presents.
- Describe the characters, their relation to each other and to the group clearly enough to give them an adequate guide to their role.

C. Selecting the Participants

1. Since the primary objective of role-playing is for each participant to achieve some empathy for another's feelings, it is usually advisable to place them in an unfamiliar role, that is one contrary to their own personality, attitudes, race or position. A further reason for doing this is that a student playing himself is often less willing to speak freely for fear of exposing his feelings and being criticized for them. Such a condition would defeat the purpose of the role playing method, which depends for its effectiveness on an uninhibited approach by the participants. For example, if the problem concerns racial feelings, much more interesing results can occur from having a white student act out the role of a Negro and vice-versa.

   However, it might also happen that you purpose is to get a student to take the kind of objective look at himself and be subjected to the kind of behavior analysis that role-playing provides. In this case, particularly if the student is not aware of the true nature of his attitudes toward something, and would therefore speak freely, it might be well to assign him to play himself. For example, a worker who is aggressive or inconsiderate on the job without realizing it might see his behavior more clearly through a role-playing experience and the ensuing analysis of his behavior by the audience.

2. If possible, cast your characters and assign each his part a day or so before the episode is to be played so they can be thinking about their parts. Tell them the roles they are to play and the situation to be acted out. You may want to give them written character sketches of the persons they will portray, or a detailed written description of situation or episode. Encourage them to do some thinking as to the best way of playing the roles, but to avoid composing their lines beforehand.

D. Preparing the Audience and Participants

1. As has been indicated previously, the success of the role-playing exercise is almost wholly dependent on the pre-planning of clear objectives and careful structuring of the episode to be played. As a further insurance that the exercise will produce the desired results the following preparation might be useful just prior to the playing of the episode.

- Re-emphasize through discussion the objective of the episode, explaining the skills and insights it is designed to teach.
- Read through the description with them once again.
- Talk a little about the nature of the characters but do not divulge any private instructions you may have given the players.

- Ask each character in turn a few questions about his identity, background, role in situation, etc. This will get them to begin thinking along the character lines and will also begin to draw the audience into the drama.
- To make the members of the audience more active participants, ask each of the, (or a group of three or four in the case of a larger audience) to pay particular attention to one aspect while watching the action. For example, one person or group might watch for expressions of emotion on the part of the characters while another watches for a key statement or turning point in the episode. Another possibility is to have each member study one of the characters closely for shifts in his attitude, or the display of a certain human relations skill, etc.

E. Analyzing the Episode

1. Analysis of a role-playing episode is much too flexible a process to allow for any set formula. In the long run it has to depend on the instructors insight, experience, perception and skill in drawing people out. However, there are a few question which can be used as a guide for analysing almost any episode. The following ones are suggested.

- What happened?
  Did people reach an understanding?
  Was the problem solved?
  What was the status at the end of the episode?
- Why did it happen this way?
  If there was agreement reached what made it possible?
  If not, what prevented it?
- What motives and feelings were displayed?
- What variations could have produced other results?

F. Evaluating the Episode

1. The group evaluation of the role-playing episode is particularly valuable from the instructors point of view, Through the criticism, comments or suggestions the students make he can find ways of polishing his techniques in composing, directing, and analyzing future role-playing exercises. When added to his own observations on the success or failure of the exercise, the group comments will make it possible for him to acquire skill and facility in making future attempts at this device more meaningful. It should be noted, however, that the evaluation period will only be of value if the instructor cultivates a free, frank attitude among the students. Only if he feels able to offer honest opinions during this discussion will anything really be learned for subsequent units such as this.

III. Sample Exercises in Role-Playing

A. Introduction

1. There are two basic types of role-playing episodes. They are similar to the extent that in each the situation portrayed hinges on some "problem" of human relations. In the first type, which could be termed "problem centered," the problem and its attempted solution remain the chief focus of attention throughout. Audience as well as characters concentrate on the skills necessary to resolve the situation, for example, the techniques of placating an angry worker or selling a television set. In this type situation it is best to keep the description of the problem brief and somewhat sketchy, but to describe the characters in detail. This will have the effect of making the characters concentrate more on the problem itself than on developing their personalities in their role.

   In the second type episode, which could be termed "character centered", just the opposite approach is needed. The situation is projected in greater detail but the characters are given only a very general identity. This means that they will be forced to concentrate on developing their roles in the episode. Since the course of the episode is largely pre-ordained they need not worry about the problems solving aspects of it. Obviously, the type of episode chosen depends on the objectives of the group.

2. The following section contains a sample situation for each type. Although each can be used as it stands, the teacher of this unit is free to alter them to suit the specific needs of the class or even to use them only as guide in composing his own if this seems best. They are to be used in conjunction with the outline that has preceded this.

Sample #1--Problem-centered

1. Situation

For the past several weeks, the foreman of a construction crew has been having a serious problem with his group of four workers. An unskilled Negro has been hired to fill one of the jobs and has not been able to perform his share of the work, causing the other three men to work that much harder. To complicate matters, all three of these men are, in varying degrees prejudiced against Negroes and resent one having been hired to begin with. The situation comes to a head when the three men threaten to leave the job if the Negro worker isn't replaced. In an attempt to alleviate the situation the foreman decides to have a talk with the four men to see if they can iron out their differences.

2. Characters

Foreman--He is a fair minded man and relatively unprejudiced in his racial views. Although he is not what could be called "liberal" in his opinion, he is in favor of giving Negroes a opportunity to break into construction jobs even if it means some inconvenience. He has also been told by union executives that the Negro in his crew has been hired as part of an overall policy and is to be given every opportunity to succeed. Therefore, it is his job to try to get the other men to cooperate.

White Workers--All three are members of white minority groups and are outspoken in their views about Negroes and racial problems. Their attitude is the often heard one that other minorities have had to work themselves up without help, and that Negroes should be able to do the same. They resent the fact that a Negro without adequate skills for the job has been forced on them through outside pressures. Having grown up or still living in a city where the racial situation is very bad, their prejudice is very personal and deeply rooted. One of them belongs to a "vigilante" type group in the city. The other two are similarly inclined but not active in this way. Their opinions and comments are long on generalizations about Negroes. When confronted with facts they tend to explain them away with further generalizations. Also they are inclined to look at the Negro's poor job performance as a sign of stupidity and/or laziness.

The Negro Worker--His role here is to defend himself and to try to counter the arguments of the three other men. To do this he should have as good a background as possible in the facts of job discrimination, etc. He should also be able to anticipate and counter the kinds of racial comments that will be directed at him by the other three.

OBJECTIVES:

GENERAL: To have the class confront and analyze a situation of interracial hostility similar to one that could be seen in any job situation.

SPECIFIC: To resolve, through an exchange of views, the immediate problem facing this group of workers, that of getting the white workers to accept the Negro in their midst.

To teach the skills of countering assumptions and illogical argument about race with sound facts and sound logic.

PREPARATION: One further bit of advice for this exercise might be to coach each of the characters in his role privately. Advise those playing the white workers that they should use those agruments that they hear most frequently from people with strong racial bias. Those playing the Negro worker and the foreman, on the other hand, should be told that, in order to state their case well, they should have a number of facts and statistics at their disposal. These should pertain to the Negro's economic condition generally and to job discrimination in particular. The accumulation of this information might be made an assignment or provided by the instructor. In either case an excellent and convenient source of such material is the Report of the Presidents Advisory Commission on Civil Rights. The paperback edition published by the New York Times is readily available.

Sample #2--Character-centered

1. Situation

The manager of the Infant Wear Department in a large department store has received several complaints from women cutomers in the past few weeks about the attitude of one of his salesgirls. In each case the complaint contained very little of a tangible nature but consisted of rather vague statements about the girl's not being properly friendly or respectful, etc. The manager knows that the girl has a tendency to display at times a somewhat aloof or superior attitude. This has been particularly true in her dealings with white customers. The manager decides to have a talk with the girl even though he's not sure that the complaints he has received are well founded.

In their talk, the manager, though not realizing it, takes a rather blunt approach to the girl, putting her on the defensive and causing her to assume a haughty and not very respectful stance. The situation is complicated by his referring to the girl's color in what he thinks is a harmless way but which the girl, in her present mood, takes badly. The scene ends with his reprimanding her just to salvage some of his pride.

2. Characters

Department Manager--a rather inflexible man with insufficient sensitivity to others' feelings or the effect that his statements will have on them.

Salesgirl--a rather proud girl and very sensitive to anything that smacks of racial prejudice, etc.

OBJECTIVES

GENERAL: To have the class confront a situation in which a break down in interpersonal relations is caused by a lack of sensitivity to another's feelings.

SPECIFIC: To provide an illustration of poor communication skills leading to a complete misunderstanding of motives.

Cultural Understanding

In our changing society, Americans are ever experiencing more contacts with people of diverse cultural backgrounds. Populations are becoming more transitory. Many people from foreign countries are coming to the U.S. and are working in businesses and corporations. Our industrially oriented student comes into contact with large groups of foreigners. These students are not prepared to understand or deal with the foreign and the different.

Students cannot be taught proper attitudes and understanding by learning rules. Our concern is to bring understanding to our students, to remove unfounded conceptions, and to help them develop skills in human relations. Many students are suspicious of foreigners, their actions are controlled by their doubts and by not having been exposed to the differences in culture.

The folling unit will attempt to remove the mistrust, doubt, and suspicion by instilling a genuine understanding of the culture and attitudes of foreign people. The instructor may achieve these goals by introducing his students to the varied cultures and the different customs. The class will include the use of films, representatives from foreign consulates, discussions, role playings and exposure to the different languages.

In the following unit, the instructor is given a plan to use as a model.

Part I

Section I: Slides (obtained from Language Office)

Methods: Film (Miguel - N.Y.U. Film Library--Rental fee $5)
Group Discussion
Role-Playing

I. Objectives:

1. To expose students to different cultures through the use of films.

2. To explain differences in customs and behavior of different ethnic groups.

3. To lift curtain of mistrust by familiarizing students with problems encountered by foreigners in a new country.

4. To stress problems of Puerto Ricans in the U.S. and to create an understanding of the problems of this particular group.

5. To help students realize thei own prejudices and become more sensitive in their treatment of foreigners.

II. Introduction:

1. In order to acquaint students with different cultures it will be necessary to expose them to different customs and behavioral patterns of people from other countries. Often, by seeing pictures about the lives of others, students will be able to make comparisons and contracts to their own lives.

2. Slides may be used to acquaint students with the island of Puerto Rico. The instructional aid must be aimed at the student's achievement of definite objectives. In this case, the slides will familiarize the student with the type of climate, the land, the influence of Spain in the architecture, the types of fruits grown on island, etc.
3. Beginning with slides of El Morro and La Fortaleza (two forts built by Spanairds) teacher may explain some history of the island--the discovery by Columbus in 1493, colonization by the Spanairds and the fact that Indians were distributed to work for Spanairds. Some of Puerto Rico's history has been written because of its strategic location first as link between Spain and her colonies, later as a bridge for Americans between North and South America as well as a base for troops to protect the Panama Canal. Puerto Rico became a possession of U.S. in 1898 with the Treaty of Paris after the war with Spain.
4. Because of the climate and land, certain products are grown such as: sugar cane, pineapples, tobacco, coffee. Also some of the main industries on the island are canning factories, rubber, cork and plastics factories, distillation of rum, and underwear factories. Maidenform, Lady Marlene and Peter Pan have factories in Puerto Rico.

5. Pictures of the beaches, fiestas, churches and celebrations will expose students to many social customs and ways of recreation which differ from ours. The Spanish influence can be seen in the celebrations especially those connected with the church.

6. Words are also a clue to their civilization. Many words used today were first heard by the Spanairds from the Indians of Puerto Rico, Some words are:

   hammock = hamac

   canoe = canoe - Indian boat

   tobacco = tabaco

   hurricane = Huracan - Indian God of evil and tempests.

7. Teacher may utilize short discussion period (1) to check whether information was understood and remembered, (2) to correct misunderstandings, (3) to provide an opportunity to re-emphasize main points.

III. Discussion

To provide continuity in lesson, to afford students opportunity to use information he has learned and to relate information to their needs teacher may use a film as a method of continuing study of Puerto Rico. One particular film "Miguel" New York University Production, N.Y.U. Film Library explains the problems of a Puerto Rican in the U.S.

1. Before showing film, the teacher should question group on their own experiences with Puerto Ricans. Discuss experiences students may have had on the job where problems have arisen due to hostilities between employees of different ethnic groups. Some of these

experiences may deal with the manner in which these employees work, their relations with co-workers, feeling of others toward foreigners and manager-employee relationship.

2. Through discussion teacher should listen to statements which generalize about foreigners. Discuss these generalizations or others which the teacher may toss out to students.

3. Some of the myths most commonly accepted as true are the following:
   a. Most Puerto Ricans are on relief.
   b. Puerto Ricans are lazy and shiftless.
   c. Puerto Ricans are crude peasants.

4. Using these statements as a basis for discussion, ask students about truth or facts behind such remarks. In this discussion, the instructor might bring in some statistics proving the fallacy of such statements. For example:
   a. Concerning the Puerto Ricans on relief, approximately 85% have always been self-supporting. An article in the New York Times in 1952 indicated that Puerto Ricans are the last group of non-residents to seek relief.
   b. Regarding statement about Puerto Ricans being peasants, teacher may point out that the majority of Puerto Ricans who settle in urban areas are from large cities in Puerto Rico. The literacy rate of the Puerto Rican in the U.S. is 90%.

5. Relating information previously learned about Spanish influence on Puerto Rican culture, the differences in character may be stressed. The Puerto Rican is not controlled by a strong feeling for financial gain. His cultural background does not stress competition but stresses more the enjoyment of life through poetry, music and dancing rather than the accumulation of money.

6. Discussion may be directed to include ideas from students on why Puerto Ricans react as they do in some of the situations the students have observed. What are some of the adjustments the Puerto Rican must make or the problems he will encounter such as the language barrier, the fact that he is poor and is forced to live in slum areas, the problem of discrimination which is not as prevelant in his homeland.

7. Discussion of the problems of adjustment will lead to the showing of the film Miguel. This film lends itself to discussion by illustrating the problems and reactions of a Puerto Rican in New York.

IV. Film

1. Films as instructional aids are very useful in teaching human-relation skills. Teacher and students may make a list of questions or points to look for in film stemming from previous discussion on adjustment of Puerto Ricans. Some questions may be:

a. How does the Puerto Rican feel in his new environment?

b. How does his daily life differ now?

c. What kind of job opportunities are available?

d. Why did he migrate?

e. How is he treated by his neighbors and co-workers?

2. After film has been shown the discussion may continue. The question written previously may be used as a basis for the discussion. Students should have different ideas and concepts of problems of adjustment. They may use their information about the life of Puerto Ricans on the island to show why he may have reacted as he did. What were his motives? Did he react as he would have in his own country.

V. Role-playing

1. In order to make the slides, discussions, and film even more meaningful to students, the teacher may use role-playing to help the students relate what they have learned to their own jobs and daily experiences.

2. Role-playing is an effective method of stimulating real-life situations. In this case, it will allow the students to place themselves in the position of a Puerto Rican in the U.S. The student can react the way the foreigner might react. On the other hand, students taking the roles of Americans will see how outside influence, assumption, and pre-established ideas along with misunderstanding can affect their relationship with foreigners.

3. Role-playing involves a described situation, in which the characters are identified and people are assigned the character roles but are told to compose their own dialog and *act* the part of the characters. In this way they actually conduct themselves in real-life situations and can later analyize and discuss the drama--why the actors said and did what they did--how they felt, what could they have done. The idea is for each player to react the way the character would, not as he would normally react.
4. To realize its maximum potential, a role-playing episode must be planned carefully. The actors model their own lines so the instructor must be prepared to take what happens and build a worthwhile learning experience from it. The instructor may suggest the situation and some facts about the characters, but the complete dialog is provided by the actors.
5. The following is a suggested procedure for building a role-playing episode.
    1. Decide what you want students to learn from the episode. Is the purpose to learn how to develop a specific technique? Or is it to produce an understanding of some principles and concepts in handling people?
    2. There are several ways of composing the situation. The instructor may design the situation to fit the objectives and learning outcomes they are anxious to achieve. If your objective is to

explore the methods and personality of a character, define the situation closely to give more direction to players but allow enough freedom for actors to explore and construct the characters.

3. Make the situation resemble conditions the students will actually face in their daily lives and at work. Make sure it is a believable situation.
4. Use enough detail so everyone will clearly understand the circumstances.
5. Establish the roles and select participants. Do not have a player act himself or he will usually cover his real feelings. Make it clear that they are to play their roles with sincerity and genuine sympathy and in this way develop good insights into the problems and behavior of the character.

Always give players dfferent names from their own as well as characters and descriptions not genuinely fitting them. Thus the player will feel less self-conscious and the audience will not feel they are criticizing the player. Assign the roles so the instructor can use the casting of players to give specific experiences to the people who need them most. For example, someone in the group may be more hostile to foreigners and has shown these feelings of hostility. Have him play the role of the foreigner to get a broadened view point, an insight into the feelings of someone else.

6. By assigning the parts a day before, each character will be given the opportunity to think about his role and identify with his part. The instructor should stress the fact that students are not to prepare a dialog, but merely to think about the characters. The audience will also be prepared and will not start cold. Pass our mimeographed sheets of the situation.
7. Be talking about and explaining the objectives it is hoped that skills and insights will be acquired. It is important to explain what the instructor feels the students should gain. The students should contribute by talking about what they think they might get from the role-playing episode. Thus everyone is involved and the motivation, reaction and comprehension will be increased throughout the whole group.
8. Now the role-playing situation may begin. The following is a sample of a role-playing episode although any situation may be of the substituted according to the needs of the students involved. The dialog has been provided merely to serve as a model. The students should not be given any dialog, only the objectives, situation, and some facts about the characters.

VI. Role-playing Episode

1. Objective: To cultivate insight into the actions of foreigners and to help students realize how these actions are effected by the foreigner's culture and the reaction of his co-workers.

2. Situation

José has been transferred from one department in a factory to a new department. He has been working at his new job for four months. Although he is receiving more benefits from this job, José has asked to be transferred back to his old position, He talks to Bill, the foreman, about returning to his former job because he does not find the men as friendly, but Bill does not wish to lose José.

3. Characters

   a. José, a young Puerto Rican, pleas t, quiet. He is somewhat depressed now and unhappy in his position,

   b. Bill, the foreman, is efficient and takes pride in his department. He is friendly but doesn't really understnad why José should want to leave his department.

   c. John, another worker in the department. He works next to José. John has been there many years. He knows his job well and feels he should be given consideration because of his ability and seniority, John is annoyed because he must work next to José. He is constantly finding fault with José's work.

   d. Vic, a co-worker in the same department. Vic works next to José also. He has worked in this department a few years and is a good friend of John. The belong to the same bowling team and have lunch together.

4. Dialogue

Instructor:

Naturally people want to be a part of the group they work and live with. Someone left out of the group may often feel so unhappy his work drops off. This has happened to José. Bill's main concern is with the production of his department although he sincerely wants to keep everyone happy. To accomplish this he must see things from the other person's point of view. He must also exercise tact in handling situations. I hope from this episode we will get a greater sensitivity to the feeling which may not show up on the surface. I hope we will get some usable ideas as to specific techniques which can be used to help a lonely person feel more at home on the job, and that we will gain insights into understanding foreigners. We will play the scene through, analyze and interpret it. First, Tim will play the part of José, Andy, the foreman, Sam, the part of John, and Carl the part of Vic. Let's talk a little bit about these people before we begin. The instructor may use this opportunity to interview the characters. During the interview the students will answer all questions as the character in the role-playing episode. By questioning the characters, the instructor gives the students a chance to play their roles before the actual episode begins, and he also helps establish some aspects of their lives and personalities for the audience to see. José, where do you live?

José: I live on McCarter Street with my family.

Instructor: How long have you been in the U.S.?

José: I came to the States about 2 years ago. Many of my relatives came before so I thought I would leave home and try to get a job here.

Instructor: Why did you decide to work at Amalgamated?

José: My cousin worked here and told me to apply when he heard they needed help. He works in the department I came from.

Instructor: Now I'd like to talk to Bill. How long have you worked here?

Bill: About 10 years. Before that I worked at Allied.

Instructor: Do you have a big turnover in your department?

Bill: No sir. Our department has one of the best records.

Instructor: Thanks Bill. O'd like to talk to John. John, how ong have you been here?

John: A good many years. I started in this department when it was just opened.

Instructor: How do you get along with the other in the department?

John: Oh, I get along alright. We, a few fellows and I, bowl together on Tuesdays. We've been together quite awhile now. I guess some of these new fellows think they know all the answers, but I don't get too friendly with them.

Instructor: May I talk to Vic for a few minutes? How do you like working here, Vic?

Vic: Oh I like it! We have a pretty close group in our department, we like to do the same things. You know, a friendly bunch.

Instructor: That's good. I think you have your parts in mind. Now will you step out of the room so I can talk to the rest of you for a few minutes. (Here the instructor assigns certain areas for each student to watch closely. In this manner, he assures audience participation and make the role-playing more meaningful to everyone.) I want Jack and Bob to watch and see if you can find out why José hasn't been accepted into the group. Gene, how does Bill's personality influence the way he handles the situation? Pat and Barbara, see how Vic and John react to the situation and what influence they have. Ken, you see if José and Bill ever see eye to eye and why or why not. All right, let's begin. This is Bill's desk. Sit down José and Bill.

Bill: Jose, I've been looking over your application for transfer. Don't you like it here?

José: The work is interesting but the guys don't seem to like me. I don't fit in.

Bill: Have you had any trouble?

José: Well, no, but they just seem to ignore me. I'm left out. I just don't like working here.

Bill: Have you tried to be friendly with them?

José: Well I tried at first but they didn't seem to respond. Sometimes I'm shy about talking because of my accent. But they didn't try either. Lately I've been having trouble with John. My work doesn't seem to be good enough.

Bill: We've been satisfied with your work up until now. I didn't realize you were having trouble with John. I'll talk to him.

José: Oh no, don't do that. It will only make it worse. They are a tight group.

Bill: Well, if you don't want me to--but why do you think they're unfriendly?

José: I've thought about it. Maybe because I have an accent or I'm from a different part of the country. I don't know. I just know they aren't friendly.

Bill: O.K. I'll talk to you about it again in a few days. Try to think it over and decide to stay. We hate to lose a good worker and it does take time to train someone for you job you know.

Instructor: O.K. let's stop for a few minutes and discuss what's happened. Then we can continue. Ken, what do you think? Any chance of reaching an agreement?

Ken: It seems to me that Bill isn't taking the whole thing seriously. He seems to shrug it off as not too important. I don't think he really understands the people in his office.

Gene: I don't think so. Bill is trying to find out what's wrong. It seems to me that José wants some special kind of treatment. He doesn't seem to have really tried to make friends.

Barbara: Wait a minute! He is new and a foreigner. It seems the others could have tried to be friendly towards him. Besides he may be hesitant to talk because he has an accent.

Instructor: Well this is speculation. We'll have to go on to see how the others react. Let's continue.

Bill: John, may I talk to you for a few minutes? I'm a little concerned about one of the boys in our department, José. His work seems to be slipping lately. Do you know what the problem is?

John: Well, I never expected any more. He's always seemed kind of lazy. You know how his type is. They work for awhile but then . . . well, you know.

Bill: I don't know John. He's got a good record, and he learned quickly. He seems to be having trouble getting along with the others.

John: I'm not surprised. He talks in a foreign language to that cousin of his. Nobody knows what they're talking about when they get together. Besides, at the beginning I tried to give him a little help, you know, I've been around awhile, but he just didn't seem to be interested. So why bother?

Bill: O.K. John. But I was wondering if you couldn't be a little friendlier towards José. Sometimes he does things a little differently but he is a good worker. He's only been here about 2 years. He may be a little shy about talking. Why don't you try by inviting him to lunch.

John: Look Bill, I told you I tried to help him. I don't think it'll do any good, but I'll ask him to have coffee with us. You know some of the guys might not be too happy. I don't care, but he is a Puerto Rican, some of the guys might not like it.

Bill: Thanks John. Could you ask Vic to stop in for a few minutes please.

Vic: Bill, you wanted to talk to me?

Bill: Yes Vic. You seem to be friendly with most of the guys. What seems to be the problem with José.

Vic: It's hard to say Bill. He doesn't seem to fit in. The guys like to get together and have a good laugh, but José doesn't seem to like to join us. Besides he had a little trouble with John.

Bill: Vic, do you think some of the guys don't make an attempt to understand him or don't try to get along with him?

Vic: I've tried a few times, but he doesn't make it too easy. Once some of the guys were talking about the riots and he got pretty emotional about the whole thing. Seemed to be resentful. Nobody really said anything.

Instructor: Cut! O.K. Jack, can you give us some ideas on why José is having so much difficulty?

Jack: It seems obvious that some of the workers are prejudiced against Puerto Ricans. John mentioned his accent, and how he seems different. Perhaps Jose isn't used to fooling around the way guys do.

Bob: Well, I think John is a kind of a leader. His security seems threatened by José who's a good worker. He doesn't understand Jose but he doesn't try to. John just says he's difficult, not friendly, and different.

Instructor: How has Bill been handling the situation? Gene?

Gene: He doesn't seem to have a real understanding of the situation. I don't think he should have spoken to John and Vic. Maybe he could have helped José more by getting him to join in some of the activities. Make him head of a committee where he'll be forced to work with the men on a semi-social basis.

Andy: May I say something? As Bill? Well, it seems you aren't being fair to me. I just wanted to try to get to the bottom of the problem, see if there's anything I can do, I thought, or Bill did, by talking to the other men he could help them see the problem.

Tim: Wait a minute! I, or José, would like to say that none of you seem very understanding or even interested. How many asked me any personal questions? None of you. When I,--José, talked to the guys he couldn't fool around. Why not? Maybe he didn't understand some of the humor or was shy about his accent.

Instructor: What is Bill going to do now? Has he reached a point where he can make a decision?

Pat: He asked Vic to help. I don't think he did much to win John over, but he could have done a little more. He should have tried to enlist John's help or try to find out why John doesn't really like Jose.

Instructor: These are some possibilities. Let's see how else it could have developed. (The teacher may repeat the episode with different students taking the same roles. The students will be able to see how the situation may develop with different characters.) You who have not taken a role, divide up and take the parts of José, Bill, Vic, and John. The others listen and see how the interview might have developed. There'll be a difference because different people are interpreting the roles.

5. Analyze

This is the point where the skill of the instructor determines how valuable the episode will be and if it will produce understanding and skills in the students. The instructor should ask questions or direct his comments to important elements in the episode so the students will be stimulated into reacting. In analyzing the episode the instructor should cover the following points:

a. What happened? Did people reach an understanding? Did they solve the problem? The value has no relation to whether or not a solution was reached and students should realize they they do not have to end the episode by reaching an agreement.

b. Why did it happen? Could this have happened in real life? What impeded the reaching of an agreement? Could it have been overcome?

c. What were the motives and feelings involved? Bring out the fact that people's feelings get into the act. Try to determine what these feelings were, where they came from, how they affected the episode, could they have been diminished. Try to make students aware of reasons for actions that the people did not really say but have unconciously motivated the players.

d. What variations would have produced other results? Why could Bill have done? What would have happened if John had . . . instead of . . .? It makes the students realize there is more than one way of handling a situation. When working with people, the situation is a changeable thing with many possibilities.

6. Evaluate and Summarize

The final step should be looking at the situation and see what can be concluded. By doing this, the instructor can be sure the students understand the significance of what they have seen.

Industrial Prep Social Studies

Introduction

This curriculum is designed for the industrially oriented student. His motivation in school is based on vocational training after graduation. He is headed towards a technical school, a job, or perhaps a two-year college. He has neither an interest in, nor a need to know, the battles and dates that comprised the old Social Studies Curriculum.

What is Social Studies? It is more than history, more than battles and dates. Social Studies is people. It includes the study of human behavior, the study of the economy, the study of society and its problems, and the study of social responsibility. These ideas should be emphasised in our curriculum. Social Studies for the Industrial Prep student should be taught using the conceptual approach rather than the factual. Ideals should be stressed. Subject matter should be made to revolve around people, rather than things, or places, or years. And the interests of the students should never stray from the teacher's mind.

The teacher's main responsibility is to create an atmosphere conducive to learning . . . ACTIVE learning. He must retain the interest of the class, for people learn best when they are interested in what is being taught. This interest should be cultivated through the direct participation of the student.

Teaching methods should have one goal in mind: the total involvement of the student in the learning process. We are striving for the elimination of the teacher centered classroom. Techniques such as projects, problem-solving, class-discussions, and teaching-games replace the lecture, and question and answer recitations. The focus is now on the student.

The testing procedure also requires a definite change. Perhaps chapter or unit examinations could be eliminated in favor of a final unit project. Or, if one feels that factual testing should remain in the curriculum, perhaps review games, such as "hang-man" using social studies terms, or competing teams trying to stump each other, could be successfully employed.

The teacher must engage in continual re-evaluation of his materials and teaching methods. Every individual student brings his own needs, goals, and background to the classroom. The curriculum must be designed to reach out to as many of these as possible. Just as every individual is different, so is every class. What succeeds with one groups may fail with another. Therefore, the repeated re-evaluation and re-adjustment of teaching materials are vital to the success of any program.

The units included in this curriculum are designed for the new, conceptual social studies. They may be taught separately, each section included as it comes up in an American History course, or it can be taught as a concentrated area study of business and industry.

Whenever, or however, each individual teacher chooses to utilize this material, it is hoped that its main objective is not lost: the goal of making Social Studies a meaningful experience for each and every student.

Nancy Ellis

Goals and Objectives:

1. To instill a knowledge of the methods of industry and of business principles.

2. To develop a comprehension of the responsibilities of industry to society.

3. To develop an understanding of urban problems.

4. To bring about an awareness of the role of the worker in American life.

5. To inculcate strong positive feelings towards the various ethnic groups that are America.

6. To motivate learning through direct involvement and participation of the student.

7. To direct students towards broad horizons and towards diversified fields of endeavor.

8. To teach students to examine and evaluate all sides of a given issue.

9. To instill qualities of ambition, understanding, and integrity in all occupational pursuits.

I. Introduction to Business and Industry
    A. Industrial Revolution
    B. Types of Business Ownership
    C. Comparison of Top 100 Industries: 1917, 1929, 1945, 1967

II. Human Utilization and Development
    A. Pre-Civil War Conditions
    B. Immigration and Industry
    C. The Rise of the Factory System
    D. The Emergence of Labor Unions
    E. Labor - Management Relationships Today
    F. Effects of Automation
    G. The Negro in Industry Today

III. Urbanization
    A. The Rise of Cities
    B. Social Problems
    C. Social Institutions in an Urban Environment

IV. Economic and Social Responsibility of Business and Industry
    A. Advertising
        1. Propaganda Techniques
        2. Psychology of Advertising
        3. Extensive Use of Advertising
        4. Ethics of Advertising

    B. Product Development
        1. Early America
        2. Impact of Industrial Revolution
        3. Problems of Product Development
        4. Creating a Market for Production
        5. Necessity of a Continued Market

    C. Problems of Free Enterprise
        1. Evolution of Capitalism in America
        2. Prices and Profits
        3. The Robber Barons
        4. Business Consolidation Today

I. INTRODUCTION TO BUSINESS AND INDUSTRY

A. Industrial Revolution

B. Types of Business Ownership

C. Comparison of Top 100 Industries: 1917, 1929, 1945, 1967

Introduction to Business and Industry

This brief unit serves as a foundation on which to build subsequent topics in this curriculum, and it provides the student with a broad overview of the American economic structure. It briefly outlines the historical background of industry in the United States, and teaches the students the definitions and explanations he needs before he proceeds to other, more complex areas of study.

Included in this unit are case studies of exemplary companies which have exhibited characteristics worthy of mention: Studebaker (Car Division), a company which has fallen from a position of success and prestige to one of liquidation; Georgia-Pacific, a company which, in the last few years, has enjoyed a meteoric rise to the top; and General Motors, which has maintained its high position for 50 years. It is hoped that students will be able to analyze WHY these changes occured.

I. Introduction to Business and Industry

A. Industrial Revolution
  1. 1790 - 1815--agricultural society
    a. industrially dependent upon Europe
    b. protective tarriff--controversial in U.S.--
       agriculture vs. industry

  2. Causes of Industrial Revolution
    a. European Embargo during Revolution and War of 1812
    b. raw materials
    c. immigration--labor
    d. tariffs
    e. desire for industrial (economic) ingenuity
    f. availability of capital
    g. expanding domestic market due to transportation

  3. Factory System begins around 1800--starts slowly
     (experiment)
  4. Location of Industry based on Economic Factors
    a. North East--transportation, water, raw materials
    b. transportation vital

  5. Culture lag leads to Social Disorganization
    a. mass production and new machines
    b. society not ready
    c. problems occur
    d. unemployment
    e. sweat shops
    f. exploitation of labor
    g. no safety regulation
    h. child labor
    i. no sanitation

B. Types of Business Ownerships
  1. The firm--basis unit or cell of capitalist economy
  2. Industry--firms producing identical or similar commodities.
  3. Plant--physical equipment of production unit.
  4. Types of ownership
    a. Individual proprietorship--company is owned and
       controlled by one person.
      1. limited capital
      2. proprietor responsible for debts

    b. Partnership--jointly owned by two or more individuals
      1. dissolves when one member leaves or dies
      2. inadequate resources
      3. each partner responsible for debts

c. Corporation--several individuals--certificate of incorporation--legal entity--corporation issues stock--stock divided into shares--held by stockholders (owners)
    1. owners not liable for debts
    2. permanent
    3. limited liability
    4. large capital
    5. easy transfer of ownership
    6. disadvantages--corporation taxes, impersonal relationships, may become too large

d. Early America
    1. many small proprietorships
    2. great competition with each other and Europe
    3. tariff slowed competition with Europe
    4. to remain in business, companies had to grow;
        a. those that couldn't dissolved company
        b. others grew bigger and developed into corporations

C. Comparison of top 100 industries--1917, 1929, 1945, 1967
    1. Make sure class has access to Forbes list of Top 100 industrials 1917 - 1967.
    2. Discussion of top industries
        a. difference in assets
            1. 1917--comparatively low
            2. progressive increase
            3. 1967 - very high
                a. number 100 in 1967 (General Tire and Rubber) has greater assets than number 2 in 1917
                b. number 1 in 1917 (U.S. Steel) has less than number 20 in 1967
                c. number 1 in 1945 (Standard Oil) has less than number 19 in 1967

            4. greater change between 1945 and 1967 than between 1917 and 1945

        b. difference in products
            1. rise of aircrafts (Boeing)
            2. fall of railroads (Pullman)
            3. rise of automobiles (General Motors)

        c. eras represented
            1. 1917 - World War I
            2. 1929 - Depression
            3. 1945 - World War II
            4. 1967 - Viet Nam conflict
            5. effect of time period on production

THE TOP 100 INDUSTRIALS IN 1917

	COMPANY	ASSETS (millions)		COMPANY	ASSETS (millions)
1.	U.S. Steel	$2,450	51.	Wilson & Co.	$102
2.	Standard Oil of N.J.	574	52.	W.R. Grace & Co.	97
3.	Bethlehem Steel	382	53.	Youngstown Sheet & Tube	97
4.	Armour & Co.	314	54.	Western Electric	96
5.	Swift & Co.	306	55.	Colorado Fuel & Iron	95
6.	International Harvester	265	56.	Great Northern Iron Ore	94
7.	E.I. du Pont	263	57.	Procter & Gamble	88
8.	Midvale Steel & Ordnance	256	58.	Atlantic Gulf & W. Indies	87
9.	U.S. Rubber	250	59.	Crucible Steel	87
10.	General Electric	232	60.	Ohio Oil	85
11.	Int'l Mercantile Marine	231	61.	American Locomotive	84
12.	American Smelting & Refining	222	62.	F. W. Woolworth	84
13.	Anaconda Copper Mining	216	63.	Cuba Cane Sugar	83
14.	Standard Oil (N.Y.)	204	64.	Mexican Petroleum	83
15.	Phelps Dodge	187	65.	Morris & Co.	83
16.	Singer Manufacturing	182	66.	American Agric. Chem.	82
17.	Jones & Laughlin Steel	168	67.	Lehigh Coal & Navigation	81
18.	Westinghouse Electric	165	68.	National Lead	81
19.	American Tobacco	164	69.	Sinclair Oil & Refining	81
20.	Ford Motor	160	70.	Utah Copper	81
21.	Union Carbide & Carbon	157	71.	International Paper	80
22.	Cambria Steel	147	72.	U.S. Smelting, Refining	80
23.	B.F. Goodrich	146	73.	Goodyear Tire & Rubber	79
24.	Central Leather	145	74.	Union Oil of California	78
25.	Kennecott Copper	143	75.	Vacuum Oil	76
26.	Pullman	141	76.	National Bicuit	74
27.	Consolidation Coal	138	77.	United Shoe Machinery	74
28.	American Sugar Refining	137	78.	Baldwin Locomotive	73
29.	Chile Copper	136	79.	Deere & Co.	70
30.	General Motors	134	80.	Studebaker Corp.	70
31.	American Can	133	81.	International Nickel	67
32.	Sears, Roebuck	130	82.	R.J. Reynolds Tobacco	66
33.	Texas Company	129	83.	Associated Oil	65
34.	American Car & Foundry	127	84.	Cudahy Packing	65
35.	Standard Oil (Calif.)	127	85.	Eastman Kodak	64
36.	Standard Oil (Ind.)	127	86.	P. Lorillard	63
37.	Magnolia Petroleum	123	87.	Atlantic Refining	61
38.	American Woolen	122	88.	Calumet & Hecla Mining	60
39.	Pittsburgh Coal	113	89.	Greene Cananea Copper	59
40.	Willys-Overland	113	90.	General Chemical	57
41.	Corn Products Refining	112	91.	Inland Steel	57
42.	Ohio Cities Gas	112	92.	United Motors	56
43.	Republic Iron & Steel	112	93.	Allis-Chalmers	55
44.	United Fruit	110	94.	American Cotton Oil	55
45.	Liggett & Myers Tobacco	108	95.	Crane Co.	54
46.	Virginia Carolina Chem.	107	96.	Libby, McNeill & Libby	54
47.	Aluminum Co. of America	104	97.	Sinclair Gulf	54
48.	Lackawanna Steel	104	98.	Distillers Securities	53
49.	Gulf Oil	103	99.	Pan American Petroleum	52
50.	Prairie Oil & Gas	103	100.	United Verde Ext. Mng.	52

THE TOP 100 INDUSTRIALS IN 1929

	COMPANY	ASSETS (millions)		COMPANY	ASSETS (millions)
1.	U. S. Steel	$2,236	51.	International Nickel	$182
2.	Standard Oil (N.J.)	1,767	52.	National Dairy Products	180
3.	General Motors	1,131	53.	Borden Co.	175
4.	Standard Oil (Ind.)	874	54.	Pittsburgh Coal	172
5.	Bethlehem Steel	802	55.	Atlantic Refining	167
6.	Ford Motor	761	56.	Warner Brothers Pictures	167
7.	Standard Oil (N.Y.)	708	57.	Glen Alden Coal Co.	166
8.	Anaconda Copper Mining	681	58.	F.W. Woolworth	165
9.	Texas Corp.	610	59.	B.F. Goodrich	164
10.	Standard Oil (Calif.)	605	60.	Eastman Kodak	163
11.	General Electric	516	61.	R.J. Reynolds Tobacco	163
12.	E.I. du Pont	497	62.	Firestone Tire & Rubber	162
13.	Shell Union Oil	486	63.	United Cigar Stores	162
14.	Armour & Co.	452	64.	Radio Corp. of America	159
15.	Gulf Oil	431	65.	American Sugar Refining	157
16.	Sinclair Consol. Oil	401	66.	Ligett & Myers Tobacco	150
17.	International Harvester	384	67.	Great Atlantic & Pacific	147
18.	Swift & Co.	351	68.	Phillips Petroleum	145
19.	Kennecott Copper	338	69.	Prairie Pipe Line	141
20.	Republic Steel	332	70.	Marshall Field	137
21.	Pullman	316	71.	Studebaker Corp.	134
22.	Western Electric	309	72.	National Biscuit	133
23.	U.S. Rubber	308	73.	Richfield Oil	132
24.	Union Carbide & Carbon	307	74.	Phil. & Reading Coal & Iron	129
25.	International Paper	283	75.	Wheeling Steel	128
26.	Allied Chemical & Dye	277	76.	Corn Products Refining	127
27.	Singer Manufacturing	269	77.	Phelps Dodge	125
28.	American Tobacco	265	78.	Crucible Steel	124
29.	Westinghouse Electric	254	79.	Loew's Inc.	124
30.	Sears, Roebuck	252	80.	National Steel	121
31.	Tide Water Associated Oil	251	81.	American Car & Foundry	119
32.	Koppers Co.	250	82.	Crown Zellerbach	119
33.	Goodyear Tire & Rubber	243	83.	United Drug	118
34.	American Smelting & Ref.	241	84.	Crane Co.	116
35.	Union Oil of California	241	85.	Long Bell Lumber	116
36.	Humble Oil & Refining	240	86.	American Woolen	114
37.	Paramount Pictures	237	87.	Sinclair Crude Oil Purch	112
38.	Youngstown Sheet & Tube	236	88.	International Shoe	111
39.	Aluminum Co. of America	235	89.	Ohio Oil	111
40.	United Fruit	226	90.	S.S. Kresge	110
41.	Jones & Laughlin	222	91.	Gen. Theatres Equip.	109
42.	International Match	218	92.	Procter & Gamble	109
43.	Pure Oil	215	93.	National Lead	108
44.	Chrysler	210	94.	P. Lorillard	107
45.	Prairie Oil & Gas	210	95.	American Locomotive	106
46.	Vacuum Oil	206	96.	American Rolling Mills	104
47.	American Rad. & Stand.	199	97.	Inland Steel	103
48.	Continental Oil	197	98.	Pittsburgh Plate Glass	102
49.	American Can	191	99.	Cuba Cane Sugar Co.	101
50.	Montgomery Ward	188	100.	Baldwin Loco. Works	99

THE TOP 100 INDUSTRIALS IN 1945

	COMPANY	ASSETS (millions)		COMPANY	ASSETS (millions)
1.	Standard Oil (N.J.)	$2,532	51.	American Can	$232
2.	U.S. Steel	1,891	52.	Great Atlantic & Pacific	231
3.	General Motors	1,808			
4.	Socony Vacuum Corp.	1,044	53.	Union Oil (Calif.)	229
5.	E.I. du Pont	1,025	54.	Singer Manufacturing	225
6.	Standard Oil (Ind.)	943	55.	B.F. Goodrich	223
7.	Bethlehem Steel	881	56.	Pure Oil	215
8.	General Electric	858	57.	Armco Steel	207
9.	Texas Co.	854	58.	Loew's Inc.	207
10.	Ford Motor	816	59.	American Smelting & Ref.	201
11.	Standard Oil (Calif.)	738	60.	Allis-Chalmers	198
12.	Gulf Oil	653	61.	Sun Oil	197
13.	Anaconda Copper Mining	616	62.	Warner Bros. Pictures	196
14.	International Harvester	591	63.	Deere & Co.	195
15.	Humble Oil & Refining	560	64.	Phelps Dodge	195
16.	Sears, Roebuck	528	65.	J.C. Penny	194
17.	American Tobacco	484	66.	Distillers Corp.-Seagrams	191
18.	Kennecott Copper	465			
19.	Western Electric	464	67.	Inland Steel	191
20.	Sinclair Oil	456	68.	Procter & Gamble	188
21.	Westinghouse	450	69.	Schenley Distillers	187
22.	Shell Union Oil	435	70.	Borden Co.	180
23.	Union Carbide & Carbon	428	71.	United Aircraft	179
24.	Aluminum Co. of America	427	72.	Continental Can	178
25.	Chrysler	414	73.	Continental Oil	173
26.	Republic Steel	413	74.	Coca-Cola	169
27.	Montgomery Ward	369	75.	S.S. Kresge	168
28.	Curtiss-Wright	354	76.	Paramount Pictures	168
29.	Swift & Co.	353	77.	General Foods	163
30.	Armour & Co.	349	78.	Lockheed Aircraft	163
31.	Goodyear Tire & Rubber	341	79.	Weyerhaeuser Timber	162
32.	Phillips Petroleum	317	80.	Radio Corp. of America	160
33.	R.J. Reynolds Tobacco	315	81.	Anderson, Clayton	157
34.	Eastman Kodak	307	82.	Douglas Aircraft	156
35.	Firestone Tire & Rubber	300	83.	Pittsburgh Plate Glass	154
36.	F.W. Woolworth	297	84.	American Car & Foundry	150
37.	International Nickel	294	85.	Twentieth Century-Fox	149
38.	Liggett & Myers	293	86.	Celanese	147
39.	Allied Chemical & Dye	286	87.	American Cyanamid	145
40	Jones & Laughlin	276	88.	Hearst Consol. Publ.	143
41.	Pullman	273	89.	Standard Oil (Ohio)	142
42.	Atlantic Refining	272	90.	American Viscose	140
43.	National Steel	261	91.	Glenn L. Martin	138
44.	Bendix Aviation	260	92.	Wheeling Steel	136
45.	International Paper	259	93.	National Distillers Products	135
46.	U.S. Rubber	243			
47.	National Dairy	242	94.	IBM	134
48.	Youngstown Sheet & Tube	240	95.	National Biscuit	132
49.	United Fruit	235	96.	Ohio Oil	132
50.	Tide Water Associated Oil	233	97.	Philip Morris	131
			98.	United Shoe Machinery	131
			99.	Dow Chemical	129
			100.	National Lead	129

THE TOP 100 INDUSTRIALS IN 1967 [1]

	COMPANY	ASSETS (millions)		COMPANY	ASSETS (millions)
1.	Standard Oil (N.J.)	$13,653	51.	Olin Mathieson Chem.	$1,163
2.	General Motors	12,916	52.	Kaiser Alum. & Chem.	1,134
3.	Ford Motor	8,090	53.	National Steel	1,129
4.	Texaco	6,363	54.	Caterpillar Tractor	1,118
5.	Gulf Oil	5,892	55.	Jones & Laughlin	1,110
6.	U.S. Steel	5,750	56.	American Can	1,087
7.	Sears, Roebuck	5,285	57.	Kennecott Copper	1,075
8.	Mobil Oil	5,512	58.	United Aircraft	1,046
9.	General Electric	4,852	59.	American Tobacco	1,038
10.	IBM	4,661	60.	Sperry Rand	1,033
11.	General Tel. & Elec.	4,511	61.	International Nickel	1,023
12.	Standard Oil (Calif.)	4,502	62.	Inland Steel	1,019
13.	Standard Oil (Ind.)	3,849	63.	Uniroyal	1,011
14.	Chrysler	3,149	64.	Tidewater Oil	1,011
15.	Shell Oil	3,035	65.	Weyerhaeuser	997
16.	E.I. du Pont	3,016	66.	Burlington Industries	992
17.	Tenneco	2,909	67.	Singer Co.	983
18.	Phillips Petroleum	2,673	68.	F.W. Woolworth	976
19.	Bethlehem Steel	2,555	69.	Continental Can	957
20.	Western Electric	2,498	70.	Georgia-Pacific	953
21.	Union Carbide	2,418	71.	Minn. Mining & Mfg.	953
22.	International Tel. & Tel.	2,360	72.	Youngstown Sheet & Tube	953
23.	Continental Oil	2,070	73.	Pittsburgh Plate Glass	950
24.	Aluminum Co. of America	1,940	74.	General Foods	929
25.	Westinghouse Electric	1,932	75.	American Cyanamid	911
26.	Goodyear Tire & Rubber	1,912	76.	Borden Co.	910
27.	Union Oil of Calif.	1,899	77.	National Dairy Products	885
28.	Monsanto	1,865	78.	Crown Zellerbach	874
29.	International Harvester	1,794	79.	Marathon Oil	872
30.	Sinclair Oil	1,791	80.	Great Atlantic & Pacific	863
31.	Cities Service	1,721	81.	Owens-Illinois	863
32.	Montgomery Ward	1,709	82.	B.F. Goodrich	850
33.	Dow Chemical	1,705	83.	Douglas Aircraft	850
34.	Celanese	1,685	84.	J.C. Penny	817
35.	Eastman Kodak	1,673	85.	U.S. Plywood	798
36.	Atlantic Richfield	1,660	86.	Federated Dept. Stores	775
37.	Allied Chemical	1,494	87.	Honeywell Inc.	772
38.	Procter & Gamble	1,483	88.	May Department Stores	759
39.	Radio Corp. of America	1,472	89.	National Distillers & Chem.	743
40.	W.R. Grace	1,462			
41.	Boeing Co.	1,445	90.	Litton Industries	743
42.	Firestone Tire & Rubber	1,417	91.	General Dynamics	734
43.	Sun Oil	1,412	92.	Lockheed Aircraft	727
44.	Republic Steel	1,411	93.	St. Regis Paper	726
45.	Anaconda	1,407	94.	Swift & Co.	718
46.	Reynolds Metals	1,341	95.	Allied Stores	710
47.	International Paper	1,305	96.	Corn Products	703
48.	Armco Steel	1,270	97.	FMC	694
49.	R.J. Reynolds	1,205	98.	Armour & Co.	686
50.	Deere & Co.	1,173	99.	Sunray DX Oil	686
			100.	General Tire & Rubber	684

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1. _Forbes_, Sept. 15, 1967, p. 54 - 61.

3. Changes (examples)	1917	1929	1945	1967
a. Studebaker	00	71	--	--
b. General Motors	30	3	3	2
c. Georgia Pacific	--	--	--	70

4. Reasons for Change
   a. Studebaker
      1. Albert Russel Erskine--President of Company 1915 - 1933. Studebaker then fourth out of 77 car companies.
      2. Erskine dreams for company; but lived only on dreams, not realistic.

1928 - merged with Pierce-Arrow Company (Pierce-Arrow prestige) paid cash rather than stock
1928 - big spending to expand
1929 - depressions--Studebaker capital declining
1931 - launched new car in midst of depression (expected depression to end soon)

      3. Studebaker went into receivership (bank runs business because of bankruptcy) Erskine committed suicide.
      4. Class discussion: Why did Studebaker fail? What qualities were lacking?

   b. Georgia Pacific--Owen Cheatham. Timber industry had been so traditional Georgia Pacific very unusual. At 24 Cheatham head of a lumber yard in Georgia--$12,000--bought it. Saw tremendous future in soft wood plywood. Borrowed money on timberlands--loans were guaranteed by timber. This process had been unheard of before, but it turned out very successfully. Very ruthless; but ruthlessness made company big.

      Class discussion: Why did Georgia Pacific succeed?

   c. Analysis of General Motors
      1. maintained top position in industry
      2. decide what qualities needed by management for company to get to top and stay there
         a. ambition
         b. initiative
         c. foresightedness
         d. shrewdness
         e. leadership
         f. ability to get most out of workers
         g. good financial sense
         h. influence of luck?
      3. Why are these qualities important to employees as well as to employers?

II. HUMAN UTILIZATION AND DEVELOPMENT

A. Pre-Civil War Conditions

B. Immigration and Industry

C. The Rise of the Factory System

D. The Emergence of Labor Unions

E. Labor--Management Relationships Today

F. Effects of Automation

G. The Negro in Industry Today

Human Utilization and Development

The emphasis for this unit is on people and the role they play in the economic structure of the United States. It is hoped that by studying this topic, a greater understanding of the problems of the American working man will emerge.

A comparison between the slaves of the south and the wage laborers of the north should help to establish a sympathy on the part of the student towards all of the unfortunate people upon whom social and economic injuries have been inflicted.

A study of immigration should illustrate to students the problems of assimilation into American society. More important, students should be led to perceive the invaluable contributions to industry made by the skilled, western-European immigrants, as well as the problems caused by an overflowing market of unskilled workers, a problem which led to immigration restrictions and quotas.

The studies of immigration and of the Negro in industry should demonstrate the vital role that all ethnic groups play in the economic and social development of the United States. Ideally students should gain a deeper understanding of all minority groups from this unit.

The section regarding the rise of the factory system demonstrates the cultural lag caused by the Industrial Revolution. An explanation of the working conditions at that time serve as a point for comparison with conditions and benefits enjoyed by workers today. The value of early labor unions in bringing about these changes should certainly be emphasized. It is hoped that an objective, in-depth study of labor unions and labor-management relationships today will enable students to decide whether or not membership will be beneficial for them.

Possibly, by exposure to a study of automation, definite occupational goals can be discovered by students who are undecided as yet about the future.

Role playing, socio-drama, guest speakers and class discussion are suggested methods to employ in the teaching of this unit.

[illegible] Human Utilization and Development

A. Pre-Civil War Conditions

Slavery:

a. used by agricultural south on plantations

b. owners responsible for all care of slaves and initial investment (about $100--year. More expensive than hiring wage laborers in North.)

   1. average value of slaves:

1790	[illegible]	1840	1860
$200	$250	$500	$700

   2. "prime field hand" value:

1790	1800	[illegible]	1860
$200	$250- 500	$700- 1500	$1400- 2000

   3. price varied according to price of cotton

c. Southern wealth based on cotton.
   1. 1840's cotton prices down (too great supply)
   2. slave prices up; slaves a great investment

d. economic condition of slave
   1. similar to a well kept farm animal
   2. not too different from poor laborers in North
   3. many (e.g. J. C. Calhoun) felt slave was better off--better housed, fed, and happier--more secure than "wage slave" of the North

e. slave labor
   1. mostly unskilled
   2. no incentive to produce more than was asked

f. yearly expense for each slave + initial investment = more money than salary of wage laborers

g. slavery--economically unsound
   1. cost of slavery so high
   2. the institution very inefficient in 1850's
   3. lowered general prosperity of cotton production

h. Some foresighted men urged South to develop manufacturing, but lack of capital, able managers, and skilled labor caused attempt to fail.

And so southern economy failed.

2. Labor Conditions in North Prior to 1840
   a. industry rather new
      1. scarcity of skilled labor
      2. wages relatively high (until 1840's)

   b. wages of unskilled labor = 1/3 to 1/2 more than in Great Britain

   c. wages adequate for single men and women, not enough for family support
   d. 1835: Waltham, Mass.--conditions of textile factory, as documented in Faulkner's Economic History of the United States:

"I visited the corporate factory-establishment at Waltham, within a few miles of Boston. The Waltham Mills were at work before those of Lowell were set up. The establishment is for the spinning and weaving of cotton alone, and the construction of the requisite machinery. Five hundred persons were employed at the time of my visit. The girls earn two, and some three, dollars a-week, besides their board. The little children earn one dollar a-week. Most of the girls live in the houses provided by the corporation, which accommodate from six to eight each. When sisters come to the mill, it is a common practice for them to bring their mother to keep house for them and some of their companions, in a dwelling built by their own earnings. In this case, they save enough out of their board to clothe themselves, and have their two or three dollars a-week to spare. Some have thus cleared off mortgages from their fathers' farms; others have educated the hope of the family at college; and many are rapidly accumulating an independence. I saw a whole street of houses built with the earning of the girls; some with piazzas, and green venetian blinds; and all neat and sufficiently spacious.

The factory people built the church, which stands conspicuous on the green in the midst of the place. The minister's salary (eight hundred dollars last year) is raised by a tax on the pews. The corporation gave them a building for a lyceum, which they have furnished with a good library, and where they have lectures every winter,--the best that money can procure. The girls have, in many instances, private libraries of some merit and value.

The managers of the various factory establishments keep the wages as nearly equal as possible, and then let the girls freely shift about from one to another. When a girl comes to the overseer to inform him of her intention of working at the mill, he welcomes her, and asks her how long she means to stay. It may be six months, or a year, or five years, or for life. She declares what she considers herself fit for, and sets to work accordingly. If she finds that she cannot work so as to keep up with the companion appointed to her, or to please her employer or herself, she comes to the overseer and volun[illegible] to pick cotton, or sweep the rooms, or undertake some other [illegible] that she can perform.

The people work about seventy hours per week, on the average. The time of work varies with the length of the day, the wages continuing the same. All look like well-dressed young ladies. The health is good: or rather, (as this is too much to be said about health anywhere in the United States), it is no worse than it is elsewhere."[1]

e. early factories
    1. unsafe and unhealthy
    2. long hours (12-15 hours, 4 a.m.-sunset)
    3. even women and children worked these hours

f. child labor--*Mechanics Free Press* - August 21, 1830, Philadelphia

"It is a well-known fact, that the principal part of the help in cotton factories consists of boys and girls, we may safely say from six to seventeen years of age, and are confined to steady employment during the longest days of the year, from daylight until dark, allowing, at the outside, one hour and a half per day (for meals) . . . and that too with a small sum, that is hardly sufficient to support nature, while they (the employers) on the other hand are rolling in wealth of the vitals of these poor children everyday. We noticed the observations of our Pawtuckey friend in your number of June 19, 1830, lamenting the grievances of the children employed in those factories. We think his observations very correct, with regard to their being brought up as ignorant as Arabs of the Desert; for we are confident that not more than one-sixth of the boys and girls employed in such factories are capable of reading or writing their own name."[2]

g. unskilled workers paid $8-$10 per month--quite a bit cheaper than upkeep of slaves
h. debtor's prisons for those unable to repay debts

3. Labor Conditions in North--1840-1860
    a. tremendous influx of immigrants
        1. increase in labor supply
        2. caused wages to go down
        3. cost of living steadily increasing

    b. From *Labor in America* by Foster Rhea Dulles comes this statement by a mill owner in Massachussetts:

"I regard my work-people just as I regard my machinery. So long as they can do my work for what I choose to pay them, I keep them, getting out of them all I can."

    c. workers given room and board, but about a dozen people were crowded into one small room.

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2. Faulkner, Harold, *American Economic History*, p.298

4. Pre-Civil War Labor Movements
  a. Workingmen's Parties--factor in Jacksonian Dem.
    1. attempted participation in government but failed
    2. end to debtor's prisons
    3. equal taxation
    4. workingmen's parties behind Jackson
    5. election poem of workingmen in election of 1832 from *Labor in America*, by Dulles.

> "Mechanics, cartmen, laborers
> Must form a close connection
> And show the rich aristocrats
> Their power in this election . . .
>
> Yankee Doodle smoke them out
> The proud, the banking faction
> None but such as Hartford Feds
> Oppose the poor and Jackson."

  b. National Trades Union - 1834
    1. to advance position of working class
    2. no political activities--completely non-political--not even supporters of any candidate
    3. national organization weak, therefore, not successful
    4. concerned about universal education. (Why?)
    5. began using the strike as a weapon--successfully. Mechanics in Philadelphia struck for 10 hour day and got it.

  c. Class discussion: What is the effect of labor on politics today?

B. Immigration and Industry
  1. Why they came to America
    a. religious persecution
      1. Puritans
      2. 1880's czarist Russia persecuted Jews
      3. Hitler persecuted Jews and Catholics

    b. political tyranny
      1. mid 19th century Europe revolutions
      2. Russian Revolution
      3. Hitler's Germany
      4. Hungarian Revolution--1956

    c. economic restrictions
      1. America = "Land of opportunity"
      2. Irish potato famine--1846, and other similar disasters
      3. American industry was expanding--need for labor.

    d. U.S. had a reputation of being a haven for immigrants--Statue of Liberty is a symbol of that haven.

The New Colossus

by Emma Lazarus (1883)

Not like the brazen giant of Greek fame,
With conquering limbs astride from land to land;
Here at our sea-washed, sunset gates shall stand
A mighty woman with a torch, whose flame
Is the imprisoned lightning, and her name
Mother of Exiles. From her beacon-hand
Glows world-wide welcome; her mild eyes command
The air-bridged harbor that twin cities frame.

"Keep, ancient lands, your storied pomp!" cries she
With silent lips. "Give me your tired, your poor,
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore.
Send these, the homeless, tempest-tossed to me,
I lift my lamp beside the golden door!"

2. Conditions of Immigration
   a. very unpleasant voyages
      1. immigrants stayed in the steerage (under the deck
      2. extremely crowded, very cold
      3. most people had sold everything to come to America, therefore, they were penniless

   b. some came as indentured laborers or redemptioners
      1. borrowed money from American "master for voyage
      2. when they arrived in America, they served "master until debt was paid
      3. The Redemptioners by Henry Bradshaw Fearon (1818)

" . . . As we ascended the side of this hulk, a most revolting scene of want and misery presented itself. The eye involuntarily turned for some relief from the horrible picture of human suffering, which this living sepulchre afforded. Mr. ----- inquired if there were any shoemakers on board. The captain advanced: his appearance bespoke his office; he is an American, tall, determined, and with an eye that flashes with Algerine cruelty. He called in the Dutch language for shoemakers, and never can I forget the scene which followed. The poor fellows came running up with unspeakable delight, no doubt anticipating a relief from their loathsome dungeon. Their clothes, if rags deserve that denomination, actually perfumed the air. Some were without shirts, others had this article of dress, but of a quality as coarse as the worst packing cloth. I inquired of several if they could speak English. They smiled and gabbled, 'No Engly, no Engly--one Engly talk ship.' The deck was filthy. The cooking, washing, and necessary departments were close together. Such is the mercenary barbarity of the Americans who are engaged in this trade that they crammed into one of those vessels 500 passengers, 80 of whom died on the passage. The price [illegible] 70 dollars, [illegible] 80 dollars, boy 60 dollars.

When they saw at our departure that we had not purchased, their countenances fell to that standard of stupid gloom which seemed to place them a link below rational beings."3

3. Suggested supplements:
    a. America, America by Elia Kazan. Look for:
        1. strong desire to come to America. Reasons for it
        2. methods used to get to America
        3. conditions found in America when he finally arrived

    b. The Island Called Ellis--produced by NBC
    c. The Inheritance--produced by Harold Mayer

4. Relationship of Immigration to Industry and Politics
    a. introduced vast labor market into America (mostly unskilled)
    b. immigrants needed money badly
        1. willing to work for much less money than American laborers
        2. replaced American workers

    c. tremendous labor supply forced wages down
    d. early 20th centurey, immigrants majority of manufacturing labor force
    e. Southern and Eastern European immigrants reluctant to unionize
        1. strikebreakers
        2. hindered the labor movement

    f. in politics
        1. resisted Progressive reforms, because these did not offer pragmatic solutions to every-day problems
        2. favored political "bosses" who exchanged jobs for votes
        3. favored Democratic Party
        4. resented Republican claim that Democrats stood for "Rum, Romanism, and Rebellion."
        5. immigrants a large faction of urban, industrial complex
        6. their votes were an influential block

5. Assimilation of Immigrants into American Life
    a. difficulties encountered
        1. language barrier
            a. lack of communication with other groups
            b. preferred to live in its own separate area or "ghetto", which was filthy, unsanitary, and overcrowded
            c. establishedtheir own churches, schools, and newspapers

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3. [illegible] 11-12.

2. bigotry
   a. examples of bigotry
      1. Know-Nothing Party (1850's)--anti-Catholic
      2. California riots against Chinese and Japanese
      3. Ku Klux Klan (1920's)--Anglo-Saxon rule

   b. reasons for bigotry
      1. fear of losing job to immigrants
      2. lack of understanding of people who are different--to many people difference = inferiority
      3. need for a scapegoat especially during times of economic or political crisis (e.g. depression, war)

3. poverty
   a. poverty perpetuates poverty
   b. lack of opportunity to leave the ghetto
   c. lack of education necessary to break through barriers of assimilation
   d. lack of class mobility

b. Assimilation Achieved
   1. as "new" immigrants entered America and took over the spot on the rung of the ladder, the "old" immigrants moved up
   2. very gradually education came to children of immigrants and taught them skills needed to get better jobs
   3. children of immigrants, born in this country, did not have the stigma attached to them
   4. 1915--former President Theodore Roosevelt delivered an address on "Americanism" to the Knights of Columbus in New York City. Here is an excerpt from that address:

"There is no room in this country for hyphenated Americanism. When I refer to hyphenated Americans, I do not refer to naturalized Americans. Some of the best Americans I have ever known were naturalized Americans, Americans born abroad. But a hyphenated American is not an American at all. This is just as true of the man who puts "native" before the hyphen as of the man who puts German or Irish or English or French before the hyphen. Americanism is a matter of the spirit of the soul. Our allegiance must be purely to the United States. We must unsparingly condemn any man who holds any other allegiance. But if he is heartily and singly loyal to this republic, then no matter where he was born, he is just as good an American as any one else . . ."[4]

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[4] Mann, Arthur, *Immigrants in American Life*, p. 147.

C. The Rise of the Factory System
  1. Impact of Industrial Revolution
    a. Industrial Revolution enhanced by demands of Civil War.
      1. discuss relationship between war and economy
      2. analyze Viet Nam conflict and effect on production, cost of living, interest rates

    b. A great surge of industrial growth following Civil War.
      1. tremendous source of raw materials
      2. labor supply more than sufficient due to immigrants
      3. growth of West as an agricultural area, and the agricultural South provided markets for industrial products of North
      4. new inventions
      5. transportation and communication improve

  2. Conditions of Labor after the Civil War
    a. increased mechanization
      1. whetted the appetite of management for greater profits
      2. tighter reign on employees

    b. longer hours than in pre-war period; people now toiled up to 18 hours a day
    c. wages
      1. often given on basis of amount of work done rather than by the hour
      2. almost inhuman efforts needed to produce a liveable wage

    d. Jacob A. Riis in How the Other Half Lives, Studies Among the Tenements of New York (1890) explains about the conditions of the sweatshop:

"They are 'learners,' all of them, says the woman who proves to be the wife of the boss, and (who has) 'come over' (from Europe) only a few weeks ago. She is disinclined to talk at first, but a few words in her own tongue from our guide set her fears--whatever they are--at rest, and she grows almost talkative. The learners work for (a) week's wages, she says. How much do they earn? She shrugs her shoulders with an expressive gesture. The workers themselves, asked in their own tongue, say indifferently, as though the question were of no interest: from two to five dollars. The children--there are four of them--turn out 120 dozen 'knee pants' a week, for which the manufacturer pays 70 cents a dozen. Five cents a dozen is the clear profit, but her own and her and her husband's work bring the family earnings up to 25 dollars a week, when they have worked all the time. But often half the time is put in looking for it. They work no longer than to nine o'clock at night, from daybreak. There are ten machines in the room; six are hired at two dollars a month. For the two shabby,smoke-begrimed rooms, one somewhat larger than ordinary, they pay twenty dollars a month. She does not complain, though times are not what they were, and it costs a good deal to live. Eight dollars a week for the family of six and two boarders. How do they do it? She laughs, as she goes over the bill of fare, at the silly question: Bread', fifteen cents a day, of milk two quarts a day at four cents a quart, butter, one pound a week at 'eight cents a quarter of a pound.' Coffee, potatoes,and pickles complete the list. At the least calculation, probably, this sweater's family hoards up thirty dollars a month, and in a few years will own a tenement somewhere and profit by the example set by their landlord in rent-collecting. It is the way savings of (this area) . . . are universally invested, and with the natural talent of its people for commercial speculation the investment is enormously profitable."[5]

1. Demonstrate the exploitation of labor by the manager of the sweatshop.
2. Is the boss in an enviable position economically? Explain.
3. What are the costs for overhead in this factory?
4. How would you evaluate the working conditions here? Explain.
5. What type of investments are made with profits? How lucrative an investment is it?

e. William Hard and Ernest Poole in an article entitled "The Stock Yards Strike; Competitive Wages and the Right to Live," published in The Outlook, Vol. LXXVII (August 13, 1904), described the harmful effects of poverty on a family.

" 'I have never had a child come to me for treatment,' said a local doctor, 'who has not had enlarged glands of the neck. These glands are meant to absorb poisonous matter. These little children live in homes so foul and overcrowded (and) they take in so much poison that their glands are overworked. They suffer, too, from under-feeding and hence anemia. In the blood of a healthy person the 'count' should be between 85 and 95. Among my patients I rejoice at finding a count of 50. I have found it as low as 28.'

In such homes it is hard for family life to keep wholesome and pure. 'Any man who has a family of little children here,' said a Polish doctor, 'simply cannot keep it alive on the un-American wage of six or seven dollars a week, especially since the cost of living is rising so high. To keep the home alive on such a wage the mother, too, must work in the yards, and sometimes she not only works by day, but comes home at night to cook for the six boarders who are crowded with the family into the small four or five room flat. With no money for wholesome recreation, and with the home so overcorwded with boarders, it

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5. Leclarr, p. 58-59 6. Ibid., p.60-67

- f. lack of safety regulations
  - 1. life in a sweatshop hazardous
  - 2. accidents frequent
  - 3. workers often incapacitated
  - 4. neither job nor medical compensation

- g. sanitation minimal
  - 1. rats and roaches
  - 2. child-laborers often acquired severe bites from rats
  - 3. diseases easily contracted

- h. suggested reading: Upton Sinclair, The Jungle

D. The Emergence of Labor Unions

- 1. Reasons for forming:
  - a. to enable workers to protect their wages from competition on the labor market
  - b. to confront management with a solid front for the interests of labor:
    - 1. 8 hour day
    - 2. restriction of immigration
    - 3. establishment of a Department of Labor
    - 4. prohibition of child labor
    - 5. graduated income tax
    - 6. government ownership of railroads

- 2. Early Unions
  - a. Knights of Labor
    - 1. aims and purposes
      - a. to create industrial commonwealth
      - b. universal education
      - c. promote unionism for all workers--skilled and unskilled
    - 2. membership
      - a. first leader--Uriah S. Stephens followed by Terence V. Powderly
      - b. open to all wage earners, excluding doctors, lawyers, bankers, liquor salesmen, stockbrokers, and professional gamblers "It gathers into one fold all branches of honorable toil." (Note the conservative nature of this union.)
    - 3. methods employed
      - a. fundamentally opposed to strikes
        - 1. felt they were too costly to both employer and employee
        - 2. 1880's--labor received some devastatating wage cuts
          - a. Knights of Labor forced to reconsider position
          - b. successfully negotiated wage increases through walkouts
          - c. Powderly did not approve

b. The N. Y. Sun editorialized

> "Five men in this country control the chief interests of five hundred thousand workingmen, and can at any moment take the means of livelihood from two and a half million souls. These men compose the executive board of the noble order of the Knights of Labor of America . . . They can stay the nimble touch of almost every telegraph operator; can shut up most of the mills and factories, and can disable the railroads. They can issue an edict against any manufactured goods so as to make their subjects cease buying them, and the tradesmen stop selling them. They can array labor against capital, putting labor on the offensive or the defensive, for quiet and stubborn self-protection, or for angry, organized assault as they will."[7]

c. Workers had confidence that a unified organization was the key to success:

"Toiling millions now are walking--
See them marching on;
All the tyrants now are shaking,
Ere their power's gone.

Storm the fort, ye Knights of Labor,
Battle for your cause;
Equal rights for every neighbor--
Down with tyrant laws!"[8]

4. decline
   a. gap between slow, peaceful methods encouraged by Powderly and forceful means favored by workers
   b. national strike urged in 1886 to gain an 8 hour day
      1. Powderly would not agree
      2. movement failed
      3. blame placed on failure of Knights of Labor to support it
   c. membership grew too rapidly--leadership could not keep up
   d. too great a division of labor
      1. skilled and unskilled from all industries
      2. working towards different goals
5. significance of Knights of Labor movement
   a. gave impetus to organization of labor
   b. created a solidarity of workers

Dulles, Foster Rhea, *Labor in America*, p. [illegible]

[8] *Ibid.*, p. 142

b. Industrial Workers of the World
1. aims and objectives
a. immediate abolition of the wage system
b. complete overthrow of capitalism
c. ". . . we must inscribe on our banner the revolutionary watchword, 'Abolition of the wage system.' It is the historic mission of the working class to do away with capitalism."[9]

2. membership
a. strongly supported by the Western Federation of Miners
b. Socialist Labor Party and the Socialist Party
c. other working groups that favored radical means labor: (e.g., American Labor Union, United Metal Workers, United Brotherhood of Railway Employees)
d. individuals not affiliated with any other group, but favoring ideas of IWW

3. methods employed
a. no involvement in politics
b. overthrow of capitalism through direct economic action
c. revolutionary practices
d. strikes, sabotage, and violence
e. never accept peace with the enemies of the workers
f. very much against ideas and methods of A.F. of L., as shown by Dulles in Labor in America,

"We have no fight with brothers of the old A.F. of L.
But we ask you use your reason with the facts we have to tell.
Your craft is but protection for a form of property,
The skill that you are losing, don't you see.
Improvements on machinery take your skill and tools away,
And you'll be among the common slaves upon some fateful day.
Now the things of which we're talking we are mighty sure about--
So what's the use to strike the way you can't win out?
Tie'em up! tie'em up; that's the way to win.
Don't notify the bosses till hostilities begin.
Don't furnish chance for gunmen, scabs and all their like;
What you need is One Big Union and One Big Strike."

4. decline
a. limited appeal
1. relatively small membership
2. too revolutionary to attract large numbers
b. involved with violence for its own sake, particularly in the West
c. aroused fear of violence in public which led to widespread distrust
d. organization of the Communist Party in 1919
1. attracted many IWW followers
2. [illegible]

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9. Ibid., p. 209.

5. significance
   a. centered attention on the desperate needs of unskilled workers
   b. gave an awareness of the struggle between classes
   c. broke into complacency of country and demonstrated necessity of change
   d. failed in its ultimate goal--could not convince America that the way to help the worker was to eliminate capitalism

c. American Federation of Labor
   1. aims and objectives
      a. concerned with immediate, practical goals
      b. improvement of wages, hours, and working conditions
      c. no impossible utopian ideals
      d. strict recognition of the independence of each trade

   2. leadership--Samuel Gompers
      a. distrust of idealistic reformers
      b. purely pragmatic
      c. ideas--narrow--towards immediate goals only
      d. lacked foresight
      e. very realistic

   3. membership
      a. originally (1881) open to all workers--
         1. skilled and unskilled
         2. all races, religions, and creeds

      b. later became open to skilled workers only
      c. each member union responsible for its own affairs

   4. methods employed
      a. education
      b. no direct participation in politics
      c. formation of legislative lobbies to encourage state and central governments to pass laws favorable to labor
      d. economic and industrial action--e.g. strikes
      e. per capita tax on all members to build up strike fund

   5. merger with C.I.O. (Congress of Industrial Organizations)
      a. Rise of the C.I.O.
         1. emerged as result of conflict within A.F. of L. between skilled and unskilled labor
         2. formed in 1930's
         3. became spokesman for unskilled
         4. tremendous rivalry with A.F. of L.

- b. Leadership of C.I.O.
    - 1. John L. Lewis--United Mine Workers
    - 2. very aggressive
    - 3. traditional opportunism of A.F. of L.
    - 4. no long-range, unreachable ideals

- c. A.F. of L. - C.I.O.
    - 1. merger accomplished--February 9, 1955
    - 2. both skilled and unskilled workers needed strong organizations
    - 3. Leaders--George Meany (A.F. of L.)
      Walter Reuther (C.I.O.)
    - 4. two groups would work together to better the standard of living of the workingman

- d. A.F. of L.--C.I.O. Break--Spring, 1968
    - 1. disagreements between Reuther and Meany
    - 2. C.I.O.--Reuther--more concerned with social environment of country
    - 3. A.F. of L.--Meany--narrow outlook--concerned only with bettering position of A.F. of L.
    - 4. Class: Discuss meaning of break in regard to position of labor. How will this effect labor's bargaining power?

E. Labor-Management Relationships Today

- 1. Discuss position of Labor in the American structure.
- 2. Discuss the strike as a method.
    - a. Gather information on some of the recent strikes (teachers, hospital workers, Bell Telephone, UAW, transit) Give opinions of the strike as a method.
    - b. Argue the ethics and responsibility of labor unions toward society.
    - c. Should public employees have the right to strike?
    - d. What are some of the immediate and long-range results of a strike? For labor? For society?

- 3. Proposed guest speakers: (1 class period each, preferably 2 days in succession)
    - 2. Local union steward to speak on role of labor union, necessity of joining union, and explanation of methods used.
    - b. Representative of management to explain how management views unions and labor, harmful effects of strikes, and what the position of labor-management relationships are today.
    - c. Class should be prepared well in advance, so that they will understand what the speakers will discuss. Questions from class should also be prepared.

F. Effects of Automation
1. Evolution of Automation
a. natural result of Industrial Revolution
b. Effect on production?
1. mass production
2. more products manufactured in shorter time
3. greater diversity of consumer goods
4. increased efficiency
5. more profit for company
6. good quality control
7. less laborious tasks for workers

2. Problems of Automation
a. employment
1. many people put out of jobs by machines
2. refined skills no longer marketable
3. can create many new jobs
a. training programs needed
b. some people replaced by machines are too young to retire, but to old to be retrained What becomes of them?

b. increased leisure time for all--good or bad?

3. Computer Industry--Example of Automation
a. How did this industry replace workers with machines?
b. creation of new jobs
1. examples
a. programmers
b. keypunch
c. repairmen

2. demand for trained labor in this field
a. class bring in classified ads--
Help wanted M/F
b. Invite speaker for IBM training school to discuss training program and placement.

3. salaries and benefits

c. extensive use of computer--have class compile a list of the diversified fields utilizing computers
d. class visit to school EDP office to see how computers work

G. The Negro in Industry Today
1. Civil Rights Bill--anti-job discrimination clause
a. Equal Opportunity Employers
b. enforcement of anti-discrimination laws

2. Discussion of Western Electric Plan
a. Western Electric established 2 plants in Newark ghettos
1. ghetto residents have experienced so many defeats in the past that they lack confidence to leave ghetto

2. brings larger labor market to Western Electric
3. as workers are trained and gain confidence they are transferred to main plant

b. problems involved
   1. lack of understanding on part of non-ghetto workers in main plant
   2. re-education of ghetto residents

c. Proposed speaker from industry to explain advantages of this type program to both labor and management, and to discuss solutions to major obstacles.

3. Labor Unions' Attitudes
   a. Negro Labor Union Membership--1963
      Poll by William Brink and Louis Harris in The Negro Revolution in America.
      NEGRO LABOR UNION MEMBERSHIP

	Total Rank and File %	Total Non-South %	Total South %	Leaders %
Member of union	19	28	11	17
Not a member	81	72	89	83

Discuss how situation might have changed since 1963.

b. From Proceedings of the Sixth Constitutional Convention of the Congress of Industrial Organizations in 1943:

THE C.I.O. STANDS OPPOSED TO ALL FORMS OF DISCRIMINATION

"This is not a Negro question alone, not necessarily so. Discrimination as has already been said, has been practiced down through the ages. Movements have been created that have fought acts of discrimination, and they have been crushed. Leaders who have supported movements designed to alleviate the sufferings that trail in the wake of discrimination have been persecuted, and they have died, just because they believed . . . in their very hearts and souls that discrimination should be eliminated.

It is the firm resolve of this organization. . . to continue this work everlastingly in the mine, in the shop, in the factory, in the social and political life of the community. That is one of the reasons why this organization was originally founded, because those who associated themselves together in this movement believed deep down in their hearts and in their souls that discrimination should be abolished."[10]

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[10] Laslett, p. 140.

[illegible]. Discussion and analysis:

1. If, as the C.I.O. says, there is no discrimination. why do so few Negroes (particularly in skilled labor) belong to unions?
2. What is the effect of non-membership on employment?

4. Negro Attitudes, as discovered by William Brink and Louis Harris in *The Negro Revolution in America*:

a. JOBS HELD BY NEGROES

	Total Rank and File %	Total Non-South %	Total South %
LABOR			
Unskilled labor	16	19	14
Building trades	6	7	6
Janitor, sweeper	4	5	4
Transportation	4	4	4
Skilled factory	4	8	2
Other labor	3	2	3
PERSONAL SERVICE			
Waiter, domestic	12	8	14
Other personal service	4	4	6
WHITE COLLAR	5	7	4
PROFESSIONAL, EXECUTIVE			
Education	8	8	11
Other professional (M.D., Clergy)	6	4	6
Businessman	2	2	3
OTHER	8	6	6
UNEMPLOYED	11	11	10
RETIRED, ON PENSION	7	5	7

b. FIELDS OF EMPLOYMENT IN WHICH NEGROES ARE GETTING BETTER BREAK

	Total Rank and File %	Total Non-South %	Total South %	Leaders Leaders %
Public jobs, local government	13	15	13	33
Social work, education	13	10	16	10
White Collar, clerks, secretary	8	11	5	19
Civil service: office, clerical	6	8	5	12
Construction: crane operator, bricklayer	8	7	8	3
Doctors, dentists, lawyers, architects, clergy	5	6	5	10

	Total Rank and File %	Total Non-South %	Total South %	Leaders %
Engineering	4	7	2	10
Factory labor, unskilled labor	5	4	6	7
Skilled labor, mechanics, plumber	3	3	4	5
Electronics	3	5	2	9
White collar, higher salesman bookkeeper, foreman	3	5	2	11
Nursing	4	4	4	1
Transportation: local and interstate (RR, bus, plane)	3	2	4	4
Small business: supermarket, grocery	2	2	2	4
Sports	3	3	3	3
Big industry, plants, large private industry and business	3	3	3	15
Hotel and restaurant: waiter, maid, domestic, waxer	2	2	2	1
Automotive trade: mechanic, car wash, repair, tires	2	1	2	-
Technicians	2	2	1	12
Business	2	2	1	2
Administrative, supervisory, executives, managers	1	1	1	4
Utilities: gas, water, power	1	1	1	-
Electricians	1	1	1	-
Military	1	1	*	-
Show business, music	1	2	1	1
Hospital labor	1	1	1	-
Personal service	1	*	1	-
Operatives	1	2	1	1
Labor Unions	*	*	1	1
Elected government (politics)	1	*	1	1
All fields better	6	5	7	9
None	3	2	4	1
All fields bad	4	4	3	4
Don't know	22	21	22	3

*Less than 1 per cent.

c. FIELDS OF EMPLOYMENT IN WHICH NEGROES GET WORST BREAK

	Total Rank and File %	Total Non-South %	Total South %	Leaders %
Skilled labor	13	17	9	40
Construction: crane operator	10	15	7	38
White collar, clerks, secretary	12	13	12	11
Big industry, plants, large private industry and business	7	6	8	22
Electricians	7	10	5	12
Public jobs: local government	6	3	9	40
Administrative, supervisory, executive, managers	6	10	3	18
White collar, higher salesman, bookkeeper, foreman	7	5	8	8
Transportation: local and interstate (RR, bus, plane)	6	6	6	9
Factory labor, unskilled labor	5	6	4	5
Small business: supermarket, grocery, small retail store	6	3	7	1
Business	3	4	3	4
Labor Unions	2	4	1	23
Civil service: post office, police	4	3	5	2
Engineering	5	5	4	1
Doctors, dentists, lawyers, clergy	3	5	2	3
Operatives	3	4	2	3
Utilities: gas, water, power	3	3	3	1
Hotel and restaurant: waiter, maid, domestic, waxer	3	*	4	1
Technician	2	2	1	2
Electronics	1	1	1	-
Civil service: office, clerical	1	*	1	2
Elected government (politics)	1	2	*	1
Communications	1	*	1	2
Automative trade: mechanic, car wash, repair, tires	1	2	1	-
Social work, education	2	2	1	1
Show business, music	1	1	-	4
Sports	*	-	*	-
Military	*	-	*	-
Hospital labor	*	*	*	-
Nursing	*	*	1	-
Personal services	*	*	*	-
None	*	-	1	-
All fields bad	8	8	8	5
Don't know	25	21	28	4

*Less than 1 per cent.

d. NEGROES ASSESS CHANCES OF EQUAL PAY FOR EQUAL WORK

	Total Rank and File %	Total Non-South %	Low Income %	Lower Middle Income %	Middle and Upper Income %	Total South %	Urban %	Non-Urban %	Middle and Upper Income %	Leaders %
Would get same pay as white	33	43	31	42	55	25	25	22	43	43
Less pay	56	47	63	48	36	63	63	66	48	48
Not sure	11	10	6	10	9	12	12	12	9	9

(CLASS: Note differences between South and non-South; lower and middle income groups. Why the difference?)

e. Projected change in economic opportunities

1. WHY PAY WILL BE BETTER, WORSE OR SAME, IN FIVE YEARS

	Total Rank And File %
Why Better	
Will get better paying job	16
Will get promoted	12
Will get raises in pay	10
More legislation	8
Will be better trained, educated	6
Why Worse or Same	
Will be on Social Security, welfare	6
Prices and taxes will go up	5
Discrimination will still be there	3
Won't be working then	3
Not Sure	31

2. WHY WORK SITUATION WILL BE BETTER, WORSE OR SAME, IN FIVE YEARS

	Total Rank And File %
Why Better	
Discrimination in jobs will decline	17
Will be wider choice of jobs	10
Moving ahead as a race	9
More training and education	4
Government will help more	3
Unions will be better	2
NAACP	2

	Total Rank And File %
Why Same or Worse	
Will not be working, retired, disabled	19
Personal health will be better	2
Will be fewer jobs	2
Not Sure	29

3. Polls were taken in 1963: Discuss any changes which might have occurred since then.

H. Conclusion:
1. Analyze changes in the position of labor from days of sweatshops to today.
2. Discuss changes in industrial production.
3. Why is education and training vital to potential employees?
4. What would you, the employee, look for in a company?
5. How do you feel about joining a union?
6. What can be done to further lessen discrimination in industry?
7. What did you learn from this unit?

III. URBANIZATION

A. The Rise of Cities

B. Social Problems

C. Social Institutions in an Urban Environment

Urbanization

This unit ventures into the area of sociology as it examines the social institutions of an urban area, and the problems caused by these institutions. It is hoped that by studying these topics, students will develop a deep social awareness and an empathy for people with seemingly insoluable problems. Perhaps they will be influenced to take part in society's endless quest for answers that will provide for a better world.

To aid in this understanding, the reading of Two Blocks Apart, edited by Charlotte Leon Mayerson, is strongly recommended. This book is an illustration of urban problems, as seen through the eyes of two seventeen year old boys. These boys talk with student readers, on their level, not at them or above their heads. This direct communication can easily lead students to a deeper understanding of the two boys and their problems.

Other suggestions for teaching this unit would be the problem methods, class discussion, and pertinant field trips.

III. Urbanization

A. The Rise of Cities
1. Location
a. 1st cities--e.g. Boston, N.Y.
1. on coast
2. good harbors
3. immigrants from Europe landed here and remained

b. Relation to Industry
1. near water for transportation
2. later--near railroad complexes (e.g. Chicago)
3. large population centers needed for labor market
4. industry in an area helped development of cities--brought population

2. Characteristics of a City
a. large population
b. relatively more people per square block than rural or suburban area
c. industrial area
d. large mixture of ethnic groups
e. representatives from all socio-economic groups
f. all governmental services are offered
g. built-up area--very few open spaces
h. huge, well-organized political machine
i. few near-by recreational facilities (parks, ball fields)
j. more cultural activities (museums, theaters)
k. better transportation
l. more anonymity
m. more fluid social structure
n. now losing residential population to suburbia

B. Social Problems
1. Crime
a. Definition and Characteristics
1. crime = violation against society
2. established by political authority of society
3. society is negative
a. if one conforms to laws, society is neutral
b. punishment for doing wrong

4. official punishment

b. Causes
1. biological determinism
a. criminals are distinct biological type
b. person cannot control [illegible]
c. criminality is inherited
d. recent British study indicates a difference [illegible] content between criminals and non-criminals

- 2. social or cultural determinism
  - a. people behave according to the customs of society
  - b. man imitates society

- 3. psychiatric causes
  - a. mental defect leads to crime
  - b. plea of "temporary insanity"
  - c. crime is evidence of the absence of normality

- 4. sociological approach
  - a. crime is based largely on environment
  - b. crime is a product of social conditions
    - 1. unemployment
    - 2. lack of social mobility
    - 3. economic position
    - 4. breakdown of family relationships

  - c. crime is caused by society

- 5. unattainable goals
  - a. society emphasizes goal of success--success = money
  - b. society then constructs obstacles to the achievement of success
  - c. some resort to crime to break through obstacles

- 6. philisophical theories
  - a. Thomas Hobbs
    - 1. man is basically bad
    - 2. society is a good influence
    - 3. the less the effect of society--the greater the chances for unacceptable behavior

  - b. Rousseau
    - 1. man is basically good
    - 2. society corrupts

  - c. John Locke
    - 1. "tabula rasa"--man is born a "blank page"
    - 2. experiences determine goodness or badness of individual

c. Punishment
- 1. imprisonment
  - a. to punish criminal
  - b. to frighten non-criminal
  - c. some rehabilitation
    - 1. schooling
    - 2. vocational training

- 2. probation--suspended sentence
- 3. parole--shortened sentence

4. sociological theories
   a. society's reaction to crime consistent with other patterns of behavior in that society
   b. "scapegoating"
      1. man possesses aggressive tendencies
      2. criminal becomes scapegoat for these tendencies

   c. heterogenious societies harder on criminal than societies which are composed of the same kind of people
   d. Suggested Field Trip--local or county courthouse and jail.
   e. Class Discussion:
      1. Would you hire an ex-convict to work for you?
      2. Can a person with a history of criminal activities "go straight"?
      3. Should the major purpose of imprisonment be punishment or rehabilitation?
      4. What can be done to lower the crime rate?
      5. Why is there a larger rate of crime in urban areas than in rural or suburban?

2. Narcotics
   a. Definitions and Characteristics
      1. drug addiction = psychological and physiological dependency on effect of drug
      2. an overpowering desire or need to continue taking the drug and obtain it by any means
      3. a tendency to increase the dose

   b. Causes
      1. social characteristics of the addict
         a. involved with minority group status
         b. from poorest, most overcrowded and physically dilapidated areas
         c. low income groups
         d. poorly educated groups
         e. large breakdown of normal family structure

      2. social characteristics of areas of high drug use
         a. slums
         b. extreme poverty
         c. subculture of street gangs prevalent
         d. now moving into affluent areas where children suffer from parental neglect

3. personality characteristics
   a. predisposition toward psychopathic personalities
   b. absence of a strong father figure
   c. emotional neglect
   d. rebellious attitude towards society
   e. tremendous personal insecurity
   f. non-aggressive personalities

c. Types of Drugs
   1. Marijuana
      a. supposedly non-addictive
      b. very dangerous because it deadens senses, slows reflexes, distorts perception
      c. tests now in process seem to indicate potential damage to chromosomes

   2. Opiates (opium, morphine, heroin)
      a. depressants
      b. slowing down of bodily processes
      c. drowsiness and lethargic feeling
      d. highly addictive

   3. Hallucinatory Drugs (LSD, Methedrine)
      a. extremely dangerous
      b. induces schizophrenic state from which one may never recover
      c. proven damage to chromosomes
      d. far-reaching consequences
         1. may bring severe brain damage
         2. may cause psychosis in later life
         3. extremely harmful to children of users

   4. Stimulants (Cocaine, benzedrine)
      a. activate user
      b. excitement and loss of fatigue
      c. after effects--extreme depression and restlessness
      d. danger of overdose--can kill

d. Conditions of Addiction
   1. becoming addicted
      a. usually through peer group

Robert Merton in Contemporary Social Problems relates an interview with an addict.

"I was at a party--everybody was having a good time--I wanted to be one of the crowd--I thought that if it didn't hurt them it wouldn't hurt me--that started the ball rolling. . . . They were sniffing at that time . . . Two or three pulled out a few caps, said, 'Here, if you want to try.' I accepted."

b. usually begins with marijuana
c. will tend to shy away from old friends to associate with other addicts as Robert Merton explains:

> "As soon as the user realizes that he must begin to plan for his future supply, he is ripe for assimilation into the drug addicts' culture. It is now vital to know others of his kind from whom he must obtain his supply. He thus learns the various devices and customs by means of which his problems are solved."

2. tolerance
   a. body adapts to dose taken
   b. progressive increase of dose which can be "safely" taken to attain high feelings

3. criminal activity
   a. narcotics and crime
      1. LSD, heroin, and methedrine can induce violent behavior
      2. support of habit extremely expensive
      3. addicts cannot hold steady jobs, therefore, have no money--resort to stealing and other criminal activities.
      4. in "Narcotics and Criminality", Harold Finestone relates in Merton's *Contemporary Social Problems*.

> "They were 'snatch-and-grab' junkies, supporting their habits through petty thievery, breaking into cars, shoplifting, and a variety of 'scheming,' such as 'laying a story' on 'a sucker' in the hope of gaining sympathy and some cash. Some enterprising ones actually had girls out 'hustling' for them through 'boosting' (shoplifting) and 'turning tricks' (prostitution). Despite the ragged state of their clothing and the harried nature of their existence, they regarded themselves as the members of an elite, the true 'down cats' on the best 'kick' of them all, 'House' (heroin). Many of them were still living at home, although they had long since exhausted the last reserves of patience of their families and 'fenced' much of their movable property. Few, if any, of them had finished high school, and on the average, they had little or no employment experience. Their attitudes towards work and the daily routine that steady employment presupposed were entirely negative. Their number-one hazard was the 'man' (the police). Once they became 'known junkies'--that is, known to the police--they were frequently picked up and sometimes sentenced--mostly for misdemeanors and, consequently, for short sentences. . . The police become a symbol of the 'revolving door through whose entrance and exit the same persons form a constant procession.

The question arises as to the relationship of the young narcotics addict to the rest of the criminal world. The impression gained from interviewing them was that these addicts were petty thieves and petty 'operators' who, statuswise, were at the bottom of the criminal population or underworld. It is difficult to see how they could be otherwise. The typical young junky spent so much of his time in a harried quest for narcotics, dodging the police, and in lockups, that he was hardly in a position to plan major crimes."

4. early death
    a. overdose
    b. lack of nutrition
    c. prone to diseases

e. Treatment and Cure
    1. withdrawal
        a. occurs if drug is discontinued
        b. very painful
        c. Harris Isbell in "Meeting a Growing Menace--Drug Addiction" reports on withdrawal in Merton's Contemporary Social Problems:

"About the sixteenth, to the eighteenth hour of withdrawal and after the patient has awakened, slight lacrimation, . . ., perspiration, and yawning appear. Restlessness and nervousness ensue and become progressively worse as the hours go by. Twenty-four hours after the last dose of the drug is administered most patients are acutely miserable, complain of chilly sensations and of cramps in the muscles of the back and extremities. Lacrimation, . . . , perspiration, and yawning become more marked. Recurring waves of goose-flesh and dilation of the pupils appear . . . Patients become increasingly restless and continually move from one part of the bed to the other. They twitch their arms, legs, and feet almost constantly. This twitching of the legs has given rise to the term 'kicking the habit.' Patients usually cover themselves with blankets even in the hottest weather, curl into a ball and present an appearance of abject misery. They may become so uncomfortable that they leave their beds and lie on a hard concrete floor in an attempt to obtain some ease from the muscular cramping and aching. They are nauseated, gag, retch, vomit, have diarrhea and may lose from five to fifteen pounds in twenty-four hours. All of these symptoms increase in intensity until the thirty-sixth to forty-eighth hour after the last dose of morphine is given. The peak intensity of abstinence symptoms from morphine is maintained from the forty-eighth to the seventy-second hour of abstinence, after which it begins to decline. Five to seven days after the last dose of morphine is given, practically all acute symptoms have disappeared and the only complaints remaining are nervousness, insomnia, and weakness. These gradually decline over a course of three to four months but minor physiologic aberrations may persist for as long as six months."

2. therapy and training
   a. needed to avoid relapse
   b. increase addicts' personal resources
   c. necessity of confinement to drug-free environment
   d. very few available treatment centers

3. cure for addiction
   a. very unlikely
   b. after treatment, addict returns to original environment and finds same problems he couldn't face before
   c. maintains same friendships as before, (with other addicts) and therefore finds it virtually impossible to make complete break from drugs

f. Suggested Class Projects:
   1. movie--*The Man with the Golden Arm*
   2. TV videoscope--(ABC production), or movie *A Hatful of Rain*
   3. speakers
      a. member of narcotics squad of local Police Department
      b. social worker connected with treatment of addicts

g. Class Discussion:
   1. Discuss the purpose of laws forbidding use of narcotics.
   2. Why is this problem becoming more and more prevalent in non-urban areas?
   3. If you owned your own business, would you hire a man with a history of drug addiction?
   4. How can society combat the problem of drugs?

3. Juvenile Delinquency
   a. Definition--child, within specified age bracket, who has committed a crime.
   b. Social Trends
      1. Negro, Puerto Rican, and Mexican delinquency rate is exceptionally high.
      2. more delinquency in lower classes than in middle or upper
      3. direct relationship between urbanization and delinquency
         a. highest rates in urban areas
         b. lowest rates in rural areas
         c. worst problems occur in inner cities, characterized by physical deterioration and poverty.

c. Causes
  1. juvenile delinquency has high correlation with slums, over crowded areas
  2. goal of upward mobility in social class structure
     a. use of crime to achieve mobility
     b. feel there is no other way

  3. weak family structure, often no father
  4. lower class subculture values of "trouble", "toughness", and "excitement"

d. Gangs
  1. causes
     a. many members have never known a real home, gang becomes the family
     b. very natural for teens to form gangs, but when teens come from background of poverty and insecurity, gangs are anti-social
     c. hopelessness and despair; no optimism for future; only the present counts
     d. many are mentally deficient
     e. most want to break away but don't know how
     f. gangs serves a definite purpose:
        1. substitute for many things lacking
        2. reason to exist
        3. source of personal satisfaction

     g. in The Shook-Up Generation, Harrison E. Salisbury points out:

"the source of the disturbance . . . lies in the home and in the community in which the youngster lives. It begins early in his life. It starts with lack of love and care and attention . . . The child who is cared for does not become shook-up. He and his friends may form a gang . . . but it will not be anti-social in nature."

  2. membership
     a. based on geography
     b. most gangs are integrated
     c. Harrison Salisbury examines the racial composition of gangs:

"Bedford-Stuyvesant is a Negro ghetto, largely created in the last twenty years. Bedford-Stuyvesant gangs are all Negro. There are no other ethnic groups on which to draw. Here Negro gang bops with Negro gang. Here is a laboratory demonstration that geography and propinquity--not racial differences--lie at the heart of street combat.

This is not to say that street company does not frequently pit a predominately Negro gang against a group largely made up of whites. Or the battle line may be drawn between Puerto Ricans and Italians. Or Mexicans and whites of mixed origin. But usually the ethnic or race factor arises from the accident of segregated housing, low-income migration or population displacement. For the most part white gang boys fight Negro gang boys not because their skin is colored black but because they live 'in the Project' or on the other side of some real or imaginary line."

c. Delinquency Control
   1. state training schools and homes for emotionally distrubed children:
      a. controlled environment
      b. vocational and academic training
      c. goal is to rehabilitate, not punish

   2. area projects
      a. delinquent viewed as product of environment
      b. changes in community as well as individual necessary
      c. recreation programs, school improvement, sanitation
      d. proposed speakers:
         1. representative of Job Corps to explain how program works, success of program, and how it helps to combat delinquency
         2. member of Urban League to speak about its various projects, particularly its new employment centers and how these projects can help rehabilitate delinquents

   3. social workers
      a. don't wait for troubled youngsters to find them
      b. go out onto street, "hang out" with gangs, talk their language, learn to understand their problems
      c. three basic rules: (gangs know and understand these rules)
         1. If social workers sees boys with weapon, he asks them to turn it in or he calls police.
         2. If gang takes dope or even possesses any type of drug, he informs police.
         3. Police must be called in to try to stop any gang fight.

      d. work very closely with gang members, and try to change their attitudes
      e. often very successful

4. police
    a. purpose is to control rather than to rehabilitate
    b. protection of society from delinquents
    c. charges of "police brutality" as Salisbury depicts in The Shook-Up Generation:

"Leroy is a Negro boy, fourteen years old, large for his age. He lives with his widowed mother in Red Hook Houses, a great public housing project just two blocks from Smith-Ninth Street station. That evening he was standing outside a neighborhood center in Gowanus when an officer noticed a bulge under his tight-fitting jacket. The bulge was a zip gun, loaded with a .22-caliber cartridge.

The officer took the gun from Leroy. A second policeman came up and made Leroy put his hands behind him. He slipped a pair of handcuffs over the boy's wrists. What happened next depends on whose story you believe. The officers say Leroy slipped from their grasp and dashed up the street. One officer drew his pistol and gave chase. He fired three shots. One, he said, was a 'warning.' Then he stumbled and his gun went off twice more 'by accident.' All three bullets found their way into Leroy's body. He fell, dangerously wounded.

'Why did they shoot?' his mother asked. 'How far did they think he would get with his hands in handcuffs behind his back?' At the hospital Leroy's mother insisted that he was a good boy, that he did well in school, that she had hoped for him to go to college, that he must have found the zip gun in the street, that he never belonged to a gang. I could imagine what she felt. A thousand parents have wept at the bedsides of their boys. Always, they say, he was a good boy. He was not a bad boy. He had never been in trouble. He didn't belong to a gang. And most of the parents believed what they said--with their hearts even when their minds told them differently."

    d. effectiveness of police, Salisbury comments:

"No area of New York has more need of public facilities than Bedford-Stuyvesant. No area has fewer. Instead, the city masses its police lest the Bedford-Stuyvesant situation 'get out of hand.' Nowhere will you find a heavier concentration of police than in Bedford-Stuyvesant. Nowhere are the police quicker to wield their nightsticks on street-corner youngsters. Nowhere are more youngsters jailed for 'unlawful assembly.' And nowhere is there more gang activity."

    e. Supplementary Aids:
        1. The Shook-Up Generation by Harrison E. Salisbury
        2. Movie--West Side Story

    f. Class Discussion:
        1. What are the causes of delinquency?
        2. Why is there a greater incidence in urban areas than in rural?
        3. What are the most effective ways of combating delinquency?

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c. Projects:
   1. Write a character study of a delinquent youngster, including family background, environment, personality characteristics, peer group, and future goals. How can he be helped?
   2. Field trip to State Reformatory
      a. How is rehabilitation accomplished?
      b. How successful are the methods used in this institution?
      c. What are the condition of this institution?
         1. physical
         2. staff

4. Slums
   a. Background
      1. Tenement is direct result of over-population and poverty
      2. Industry moved into cities and wealthier people moved out
         a. residential land values
         b. sought more peaceful areas

      3. immigrants and poor laborers moved in
         a. near places of work
         b. cost of living low

   b. Conditions
      1. "Report of the Select Committee Appointed to Examine into the Condition of Tenant Houses in New York and Brooklyn" in 1857 exposed the following, as related in The Social Setting of Intolerance by Semour T. Mandelbaum:

> "It was four stories in height, and cut up into suites of apartments, consisting of room and dark bedroom, for which was charged a rent of from $5 to $6.50 per month. It was evident that no thoughts of providing comfort, or preserving health, had entered into the plan of construction; and it was quite as apparent that, in the business of letting, no rule was followed but to secure the occupancy of every part of the building. The place literally swarmed with human life, but life of so abject and squalid a character as to scarcely merit the name. Dirty, half-naked children, slatternly women, and desperate looking men filled the cramped rooms and entries to suffocating populousness. There was no provision for ventilation; the drainage was insufficient; the sinks in wretched condition, and the entire structure thick with nauseating smells. This building fronted upon the street, and was divided from a rear building by a confined yard, entered through it. The latter was constructed on the same plan, or want of plan, but the rooms were cheaper, and proportionately darker, smaller and unhealthier. In case of fire--so contracted is every avenue of egress--there could be great difficulty of escape . . . "

2. today living conditions still intolerable
3. slumlords take advantage of population, Harrison E. Salisbury has discovered in a 5 story tenement:

> "They are cheated and robbed without mercy. A 15' x 20' room in a 100 year old house is rented to a family of 4 for $20.00 a week. Slightly smaller rooms cost $15.00. There is no water. Little heat in winter. A gas plate for cooking. No refrigerator. No ice-box. No bath. No shower. A dirty toilet and a single faucet down the hall . . . Six cubicles on a floor. By renting each at $15.00 a week the thieving landlord was taking more than $1,000 a month out of a rat-infested building in which a farmer would not think of housing goats."

4. children have no place to play--no parks, playgrounds
5. area filled with social problems and vice

c. Housing Projects
  1. housing projects in many cases institutionalised slums
  2. intention good, but in practice projects often fail
  3. admission based on income--the lower the income, the higher the priority for living there
  4. no discrimination allowed
     a. low income rule
     b. makes minority group ghettos out of projects

  5. when family's income rises past minimum figure
     a. they must leave project
     b. forces economic and social levels to remain low

  6. majority of residents either unskilled workers, welfare cases, unemployed, or disabled
  7. little motivation for improvements of conditions
  8. no communication between landlord and residents
  9. Salisbury uncovered example of what can be accomplished--Chelsea on the lower West Side in New York City
     a. "We set up a model apartment. We showed the new people how to furnish their apartments. We explained about time payments and how they could buy second-hand furniture much cheaper and fix it up with a little paint. We visited every family as it came in. We told them all about their new community."

     b. Chelsea not a slum
     c. no gangs or delinquency there
     d. no discrimination of minority groups

d. Civil Disorders
    1. causes
        a. poverty and destitution
        b. racial discrimination
        c. unemployment
        d. feeling of despair about future
        e. inability to break out of ghettos
        f. society's indifference to problems of lower classes

    2. solutions
        a. President's Commission on Civil Disorders:
            1. provide training for jobs
            2. provide better housing conditions
            3. pass effective legislation against slum lords
            4. enact effective anti-discrimination laws
            5. improve education in slums
            6. provide more recreational activities

        b. alternate proposals as suggested by some public officials
            1. tighten up police activity
            2. stricter penalties for rioters
            3. shoot anyone who looks as if he is about to commit a crime
            4. scare potential rioters by very strict punishments

        c. analysis of solutions
            1. Civil Rights Commission suggestions--very effective
                a. spent months studying situation
                b. attempt to solve problem by eliminating cause
                c. positive approach

            2. alternate proposals
                a. very negative attitude
                b. attempting to stop violence through use of more violence
                c. shows complete lack of understanding of issues
                d. "white backlash"

e. Class Discussion:
    1. Discuss conditions of slums.
    2. How do slums lead to other social problems?
    3. Why do many of the Federal Housing Projects fail?
    4. What is your opinion of welfare?
    5. Which method of riot control do you prefer? Explain

C. Class Projects:

1. Divide class into small (2-3) groups. Have each group research an area in which there has been a racial disturbance--Watts, Detroit, Newark, Washington D. C., Chicago, San Francisco, Milwaukee, Harlem, Cleveland
    - a. Discuss living conditions in area.
    - b. What were the underlying and immediate causes of disturbance?
    - c. What riot control methods were used?
    - d. What, if anything, has been done to change the conditions?

2. Speaker from Welfare Bureau to explain how Welfare works and suggest proposals for improving system.
3. Attend a city clean-up day in Harlem.
4. Two Blocks Apart by Charlotte Leon Mayerson
    - a. Editor's Note:
        1. What do Juan and Peter have in common?
        2. In what ways are they strangers?
        3. What attitudes do they share?
        4. What type of family background do the two boys have?
        5. Describe Juan.
        6. Describe Peter.

    - b. Family--Juan
        1. Describe in detail, Juan's family.
        2. Describe in detail, Peter's family.
        3. Why does Juan worry about his younger brother?
        4. What did you learn about his 19 year old sister?
        5. Where is his other sister. Why does Juan admire her?
        6. What does Juan remember about Puerto Rico?
        7. Why does his family talk about going back?
        8. What does Juan remember about his father? His grandfather?
        9. How does Juan feel about the way women are treated in Puerto Rico?
        10. How did Juan's family communicate in Puerto Rico? Is it different now? How?
        11. Compare the economic situation of the Gonzales family in New York to their situation in Puerto Rico.
        12. What is Juan's relationship with his father? How does he feel about him? Why?
        13. Why did Juan grow up so fast?
        14. How did the family get along during hard times?
        15. How does Juan feel about welfare?

16. Explain Juan's feelings about stealing? Why did he steal?
17. How did the Sleepwalker treat Manuel?
18. What was the difference between Manuel's stealing and Juan's stealing?
19. How does Juan feel about his stepfather?
20. How does Juan feel about his mother? Why?

c. Family--Peter
   1. How does Peter feel about his parent's marriage?
   2. How does Peter's father discipline him?
   3. What kind of childhood did Peter's father have?
   4. What are Peter's views on discipline?
   5. What does Peter look for in a girl?
   6. Describe Peter's social life.
   7. How does Peter's mother discipline him?
   8. What happened to Peter's sister?
   9. How did the situation effect the family?
   10. Describe Peter's relationship with his older brother.

d. Neighborhood--Juan
   1. Where does Juan live?
   2. How does Juan feel about his home? Why?
   3. What are the dangers of Juan's home?
   4. Why are the projects an improvement?
   5. What did Juan learn about belonging to a gang?
   6. Why did he visit his old neighborhood after he moved?
   7. What is the difference between a boy alone and a boy in a gang?
   8. What are the advantages of a gang?
   9. Why didn't Juan join in?
   10. Why do the young boys get the worst of a fight?
   11. How does Juan feel about the police?

e. Neighborhood--Peter
   1. For how long have the Quinns lived in that neighborhood?
   2. How is the building holding up?
   3. How does Peter feel about the nearby slum?
   4. How does Peter explain the fighting in the slum?
   5. Is Peter prejudiced against all Puerto Ricans?
   6. How does Peter feel about fighting?
   7. How does Peter feel about the police?
   8. What kind of families do Peter's friends come from?
   9. What is Peter's most immediate goal

f. Schools--Juan
   1. Describe Juan's school.
   2. How would Juan educate his children? Why?
   3. What is the Adjustment Class?
   4. What type of classes does Juan have now?
   5. How does Juan feel about drugs?
   6. Does Juan feel the school is fair? Explain.
   7. What is the racial composite? How do they get along?
   8. How does Juan feel about his teachers?
   9. How do the students feel about school? About grades?
   10. How does Juan feel about rich people?
   11. What does Juan want for the future? Is school helping him attain it? Explain.
   12. Where does Juan decide is the best place for him after graduation. Why?

g. Schools--Peter
   1. What types of schools do Peter's friends attend?
   2. What is Peter's school like academically?
   3. What subjects does he take?
   4. What is his goal?
   5. How do the teachers discipline the students? How does Peter feel about this discipline?
   6. What is the racial composite of Peter's school?
   7. Did Peter feel there was ever any prejudice?
   8. What are the goals of Peter's classmates?
   9. Why does Peter want to go to college?

h. Politics--Juan
   1. Compare Juan's interest in politics to Peter's.
   2. What does Juan think about the people that run for office? Does he think our government is for all the people?
   3. When will the people run their government according to Juan?
   4. What does he think about sit down strikes?
   5. How does Juan feel about a cooperative effort by Negroes and Puerto Ricans?
   6. Why does Juan think he's alone?
   7. What is the difference between Malcolm X and Adam Clayton Powell?
   8. Why is the younger generation more progressive than the older?

9. What caused the Harlem Riots?
10. What response do riots get?
11. What does Juan predict for the future?

i. Politics--Peter
   1. When did Peter pay attention to politics?
   2. How does he remember Kennedy's death?
   3. What were his feelings in the election of 1964?
   4. How does he feel about President Johnson? Humphrey?
   5. How would a Negro or Puerto Rican candidate fare in an election? Why?
   6. Why are the Negroes and Puerto Ricans lacking education?

j. Goals and Ideals--Juan
   1. Why are the people of Harlem having trouble solving their problems?
   2. Where would Juan like to live? Why?
   3. Why will he never get there?
   4. Who does Juan admire? Why?
   5. Juan agrees with Hitler on one point. What is it and why?
   6. How does scapegoating exist to Juan?
   7. How does Juan feel about the middle class neighborhood nearby?
   8. What advantages does he have over Peter?
   9. What advantages does Juan think Peter has?
   10. How does he feel about religion? Why?
   11. What is he looking for in a girlfriend now?
   12. Juan claims he would like to be like white people. Why?
   13. Who does he blame for his problems?

k. Goals and Ideals--Peter
   1. Why does Peter admire his brother?
   2. How would he want to bring his children up?
   3. How does he feel about white southerners?
   4. How does he feel about demonstrations?
   5. Why do Negroes and Puerto Ricans have a hard time getting ahead?
   6. What kind of schools do the Negroes and Puerto Ricans attend?
   7. How does he feel about school bussing?
   8. What is his opinion of the riots?
   9. What method would Peter use to solve the problem of discrimination:
   10. Why is religion important to Peter?
   11. What is Peter's attitude towards helping others in trouble?

1. Conclusion
    1. Which of the two boys do you most admire?
    2. Which do you feel will have a more successful life?
    3. If you were in business, and Juan and Peter both applied for the same job, which would you hire (assuming that both had the necessary qualifications) and why?
    4. Which would you rather have as a co-worker and why?

c. Social Institutions in an Urban Environment
  1. Family
    a. characteristics
      1. many broken homes
      2. often lack strong father image
      3. many 'working mothers'
      4. activities centered outside home
        a. all older members work away from home
        b. availability of a car
        c. most leisure time activities are away from home

      5. lower class parents
        a. work long hours to try to raise financial standards
        b. rarely see children

    b. significance
      1. family relationships often unstable
      2. no strong guidance for children
        a. children often neglected
        b. sometimes parents guilty of severe discipline without affection

      3. parents often "too busy" for children
      4. children lack security
      5. children look to peers for security and affection
      6. children forced to grow up too soon

  2. Education
    a. conditions
      1. very large and impersonal
      2. overcrowded classrooms
      3. understaffed
      4. old, unattended buildings
      5. lacking in supplies
      6. often severe discipline problems:

a. In The Shook-Up Generation, Dr. Lawrence Bergenbaum, assistant principal of a Brooklyn school explains:

"The kids reflect the adults and the world they live in. People have less to hold on to today. What have they got to believe in? We live in an era of violence and speed. The emphasis is on materials things."

b. Irving Levin, principal of a school in Brooklyn told Mr. Salisbury:

"The youngsters don't realize it. Some teachers don't realize it. But, by and large, the kids behave better in school than anywhere else--better than they do at home and better than they do on the street. It is not easy for many of them. They are not mature enough for education. Later they realize this. There are not many kids who really don't want an education."

c. high correlation between low reading ability and discipline problems

7. environments discourage education
8. children lack motivation

b. possible solutions to problems of urban education:
   1. pre-vocational training for non-academic students
   2. apprentice system
   3. 12 month school program
      a. in depth education
      b. keep children busy

c. supplemental aids:
   1. movie: Up the Down Staircase
   2. movie: To Sir with Love
   3. film: Children Without

3. Religion
   a. urban families not as religious-centered as rural families
   b. church attendence negligible among lower urban classes
   c. social agencies connected with churches
      1. limited to small locality
      2. supervise only their own members
      3. small funds and staff

D. Conclusion:

1. What factors influenced the rise of cities in America?
2. Is there any relationship between mass media and social problems such as crime and delinquency?
3. How do the lives of Juan Gonzales and Peter Quinn mirror social class difference in urban America?
4. What role should industry play in helping to solve urban problems?
5. What can you as an individual do to aid in the solution of social problems?
6. How can government agencies aid the city?
7. Compare the conditions of the social institutions in large urban centers to your own.
8. What did you learn from this unit?

IV. ECONOMIC AND SOCIAL RESPONSIBILITY OF BUSINESS AND INDUSTRY

- A. Advertising
- B. Product Development
- C. Problems of Free Enterprise

Economic and Social Responsibility of Business and Industry

The emphasis for this unit is on social responsibility and on the development of an awareness of the American economic structure. It is hoped that students will be able to understand various economic issues from both the viewpoint of the consumer, a role which they already play, and from the viewpoint of business and industry, a role in which they soon will be involved. The goal is not to decide right and wrong, or to place blame, but rather to study the subject from both sides and to broaden minds sufficiently to allow for the idea of compromise.

Advertising, product development, business consolidation and profit-making are some of the fields encountered. The student should be able to understand the role of state and national governments in regard to these and other issues. He should develop the ability to analyze the advantages and disadvantages of laissez-faire, competition, and consolidation.

Included in this unit is an article written by John D. Rockefeller in 1907. Still relevant today, it provides excellent advice for students. It can be used to motivate them towards realistic occupational goals and towards the successfull fulfillment of these goals.

Suggested teaching methods include projects, role playing, and business games, in addition to class discussion.

A. ADVERTISING

1. Propaganda Techniques
2. Psychology of Advertising
3. Extensive Use of Advertising
4. Ethics of Advertising

IV. Economic and Social Responsibility of Business and Industry

- A. Advertising
  - 1. Propaganda Techniques
    - a. glittering generalities
      - 1. meaningless words and phrases
      - 2. "Wet and wild"
      - 3. "Marlboro country"

    - b. testimonial
      - 1. famous people endorse product
      - 2. sports stars advertising Gillette
      - 3. Jack Benny and Texaco

    - c. bandwagon
      - 1. idea that everyone else is using product
      - 2. "Metropolitan Life insures 45,000,000 people"

    - d. plain folk
      - 1. identification with advertisement
      - 2. use of ordinary people in ads
      - 3. "common housewife" idea

    - e. transfer
      - 1. transfer desired image to product
      - 2. "more doctors recommend . . . "
      - 3. use of pictures to create image
      - 4. President Johnson speaking with a picture of President Kennedy in background

    - f. name calling
      - 1. insulting competitors
      - 2. degrading competition

    - g. card stacking
      - 1. eliminate all unfavorable evidence
      - 2. present only the facts advantageous to product

  - 2. Psychology of Advertising
    - a. Motivational Research
      - 1. probes three levels of human consciousness
        - a. conscious rational level
          - 1. awareness of what is going on
          - 2. able to tell why

        - b. subconscious level
          - 1. vague idea of what feelings are
          - 2. unwilling to explain why
          - 3. level of fears, attitude, prejudices, and emotions

        c. unconscious level
            1. unaware of true feelings
            2. unable and unwilling to discuss attitudes and emotions

2. primarily concerned with second and third levels
3. deals in manipulation of consumer's subconscious in order to create desire for product
4. goal--to create advertisements which sell emotional security
    a. subsurface desires and needs probed to uncover psychological vulnerability of public
    b. advertisements geared to these weaknesses

5. methods used
    a. unstructured interview
        1. question and answer on conscious level
        2. projective testing to discover "real" reaction (subconscious) to product, ad campaign, and brands
            a. Rorschach Test
            b. T.A.T.
                1. two people performing action--what are they doing?
                2. picture of people consuming product--what product?
                3. cartoons presented
                    a. people must fill in balloons
                    b. man looking at car--what is he saying?

            c. Free Association
                1. list of 10 names, one is potential name of new product
                2. reaction to words

        3. listing of images of certain products or activities--conscious level
            a. for soap--What do you think of taking a bath?
            b. airlines--How do you feel about travel?
            c. magazines--What kinds of reading materials do you enjoy?

    b. round-table discussions
        1. group discussion
        2. very relaxed atmosphere
        3. effective method
        4. [illegible]

- c. Psycho-Drama
    - 1. role playing
    - 2. man talking to car salesman
    - 3. women at laundromat

- b. Use of color
  - 1. reaction to color
    - a. list many colors widely used in advertising
    - b. have class give images and adjectives describing color
      - 1. red
        - a. danger
        - b. impulse
        - c. anger
        - d. bright
        - e. passion

      - 2. pale blue
        - a. calm
        - b. quiet
        - c. peaceful
        - d. sky

      - 3. yellow
        - a. bright
        - b. sunshine
        - c. happy

      - 4. black
        - a. somber
        - b. conservative
        - c. sophisticated
        - d. quiet

  - 2. effect of color on consumer
    - a. Color Research Institute test on package designs for new detergent
      - 1. three different packages filled with detergent
        - a. one predominatly yellow
        - b. one predominatly blue
        - c. one blue with splashes of yellow

      - 2. all three boxes filled with identical detergent
      - 3. purpose: to see how much package influences consumer
      - 4. results:
        - a. yellow box--too strong for housewives tested
        - b. blue box--left wash dirty looking
        - c. blue,yellow box--very favorable comments

      - 5. Women tested influenced only be color of box.

b. color and "impusle buying"
1. Du Pont survey on shopping habits of American housewives:
". . . seven out of ten of today's purchases are decided in the store, where the shoppers buy on impulse."[11]
2. color of package vital to impulse buying
a. must attract shopper
b. must invoke favorable response to item

3. psychologists report on color
a. women most attracted to red
b. men most attracted to blue

4. Gerald Stahl, executive vice-president, Package Designers Council claims in Vance Packard's The Hidden Persuaders:
"You have to have a carton that attracts and hypnotizes this woman, like waving a flashing light in front of her eyes."

c. creating an image
1. importance of an image--as ad man David Ogiloy proclaimed:

"Every advertisement must be considered as a contribution to the complex symbol which is the brand image . . . Many manufacturers, even among the new generation, believe that women can be persuaded by logic and agrument to buy one brand in preference to another--even when the two brands are technically identical . . .

"The manufacturers who dedicate their advertising to building the most favorable image, the most sharply defined personality for their brands are the ones who will get the largest share of these markets at the highest profit--in the long run."[12]

2. image-building
a. use of slogans
1. Lay's potato chips--"Bet you can't have one!"
a. invokes challenge or dare
b. invites consumer to accept challenge
c. throwback to childhood by phrasing slogan in language used by children
d. extensive use of slogan in variety of settings

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[11] Packard, Vance, The Hidden Persuaders, p. 90.
[12] Mayer, Martin, Madison Avenue, U.S.A., p. 36.

2. American Airlines--"Fly the American Way"
    a. appeal to patriotism
    b. implies--since it's American, naturally it's the best
    c. musical jingle
        1. minor key--image of strength
        2. little note variation--image of smooth, steady flight
        3. very catchy--invites whistling and singing

3. Tiparillo--"Should you offer a Tiparillo to a lady?"
    a. cigar smoking--extremely masculine
    b. Tiparillo--small cigar
    c. appeal to both sexes
    d. implies equality for women--appeal to sophisticated career women
    e. question format--maleness of product

4. Pepsi-Cola--"Join the Now Generation"
    a. appeal to youth
    b. appeal to those who fear growing
    c old
    c. impulsive, active, exciting

5. Miller's High-Life--"The champagne of bottled beer"
    a. beer--traditionally lower class beverage
    b. appeal to upper classes
    c. elevation of image of beer
    d. transfer image of champagne to that of beer

6. Chase Manhattan Bank-"You have a friend at Chase Manhattan"
    a. fear of banks--fear of rejection for loan
    b. bank--symbol of authority
        1. capable of disapproval
        2. resists closeness to public

    c. reluctance to divulge personal finance finances
    d. slogan geared to inspire trust
    e. bank is a "friend"

7. Jello--"There's always room for Jell-o"
    a. Jell-o light dessert
    b. image of Jell-o as old family friend
    c. appeal to dieters

b. use of pictures
    1. Marlboro
        a. very rugged man with tatoo
        b. virility
        c. smoking--very masculine trait
        d. strength

    2. Imperial Margerine
        a. crown appears on user's head
        b. appeals to ego of consumer
        c. implies richness of product
        d. luxury product

    3. White Owl
        a. girl dressed as white owl
        b. complements tough, masculine image of cigar
        c. white = image of smooth, pure smoking
        d. double entendre--cigar seen as a woman
        e. appeal to masculinity

    4. Fresca
        a. ice, snow, freezing sensation
        b. used primarily in summer
        c. refreshing
        d. cooling
        e. perfect refresher for hot summer days

    5. Dove--dishwashing liquid
        a. detergent turns into a dove
        b. dove-symbol--peace, gentleness
        c. Dove for dishes--thinks its a hand cream
        d. mildness
        e. gentle to hands

c. Naming of Products
    1. cars
        a. wild names
        b. implies power
        c. strong, exciting, masculine
        d. examples:
            1. Mustang
            2. Cougar
            3. Valient
            4. Imperial
            5. Impala
            6. Tempest
            7. Cutlass
            8. Charger
            9. Barracuda
            10. Wildcat

2. laundry products
   a. Bold - strong
   b. Ivory Snow - gentle
   c. Cheer - bright

3. after shave lotion
   a. very masculine
   b. implies freshness
   c. examples:
      1. Jade East
      2. Sun-Up
      3. 007
      4. Pub
      5. Hai-Karate
      6. Old Spice

d. Wish Fulfillment
   1. Pond's cold cream
      a. "7 day beauty plan"
      b. begins with plain girl
      c. after 7 days of using Pond's--becomes beautiful
      d. always catches her man by end of commercial

   2. Clairol
      a. very plain, drab girl
      b. sees "blondes have more fun"
      c. becomes blonde
      d. immediately very popular

   3. Listerine
      a. subject has trouble in relationships with people
      b. is told--"You have bad breath"
      c. tries Listerine
      d. overwhelming success

e. Identification
   1. *Time Magazine* (July 12, 1968) states:

" . . .The old commercial is being replaced with the truly new brand of ad with miracle ingredients--some honesty, some humor . . . and it has transformed the viewer into a consumer . . .

"He identified with the characters who for one look almost like real people--fat, scrawny, drab, sassy, ordinary."

   2. As Vance Packard explains in *The Hidden Persuaders*:

"Laundry soap women who were dressed in chic upper-middle class costumes just didn't go over with the readers, who couldn't identify themselves with the women in question."

3. Examples of use of identification:
   - a. Comet cleanser--Josephine the Plumber
   - b. Alka-Seltzer--"No matter what shape your stomach is in . . ."
   - c. common everyday housewife in almost all household good ads
   - d. tired salesman in Hertz commercial

4. Mary Wells, president of Wells, Rich, Greene relates in *Time* Magazine:

"You have to talk person to person with people, use people words and people terms. You have to touch them, show humanness and warmth, charm them with funny vignettes. You have to make them feel good about a product so they'll love you."

f. Marketing Emotional Needs
1. emotional security
   - a. M-R. discovered food related to security
   - b. home freezer--"frozen island of security"
   - c. according to Weiss and Geller Agency
   - c. do-it-yourself-tools--frees man from strain of inter-personal relationships

2. ego-gratification
   - a. exphasis on consumer rather than on product
   - b. exaltation of roles commonly associated with drudgery (e.g. housewife)

3. creative outlets
   - a. easy to prepare foods--allow consumer to add personal touch
   - b. enjoyment of putting something of yourself into product

4. sense of power
   - a. cars--horsepower
   - b. gasoline--adds power
   - c. cereals--Cheerios--"I get my go"

g. Gimmicks
1. games
   - a. gas station
   - b. supermarket
   - c. chance of winning

2. stamps
   - a. value
   - b. compensation
   - c. raise prices

3. false-bargain
   - a. odd number prices
   - b. "large economy size" sometimes more expensive than small size
   - c. raise price and claim "Special Price"

3. Extensive Use of Advertising
   - a. TV
     - 1. about 20% of TV air time for commercials
     - 2. 2,000 advertisers spending about $3.1 billion
     - 3. cost of 1 minute commercial average of $22,000
     - 4. maximum importance of casting
       - a. actors--must seem authentic
       - b. announcers--voices must have "appetite appeal" or "prestige sound"
     - 5. past 2 years--product advertised increased by one third
     - 6. reaches 95% of nations homes
     - 7. companies tend to sponsor programs which appeal to their type of audience
       - a. cigarette companies would not sponsor cartoon program
       - b. household products lean toward daytime programming--appeal to women
   - b. Radio
     - 1. "Radio is about the only way you can reach some markets. Take teen-agers. They don't watch television . . . They certainly don't read. But they listen about three hours a day."[13] Spokesman, Radio Advertising Bureau
     - 2. much cheaper than TV advertising
     - 3. "saturation campaigns"--same commerical over and over again on many stations
     - 4. personality of announcer important
     - 5. not a universal media
   - c. Magazines
     - 1. tremendous advertising volume
     - 2. opportunity for selected audience
       - a. Good Housekeeping--products for women
       - b. Seventeen--adolescent girls
       - c. Esquire--men
       - d. Field and Stream--sportsmen
       - e. Life, Look--all groups
       - f. Forbes, Fortune--businessmen
     - 3. widely-read
       - a. in waiting rooms
       - b. in households of subscriber
   - d. Newspapers
     - 1. oldest advertising medium
     - 2. local advertising
     - 3. town paper--more to local distributors than to product itself

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[13] [illegible] 154

e. Other areas of Advertising
    1. billboards
    2. public transportation
    3. store displays

4. Ethics of Advertising
    a. Constructive effects
        1. helps consumer become aware of variety of products
        2. brings out virtues of products
        3. product is on defensive--must prove it is best
        4. can be used for beneficial purposes
            a. safe driving campaign
            b. American Cancer Society

        5. keeps down price of newspapers, magazines

    b. Harmful effects
        1. products which are dangerous to health--equated with having good times to encourage consumption
        2. people manipulation attempts--motivational research
        3. play on impulses of small children
        4. develop attitudes of wastefulness

    c. Curbs on Advertising
        1. Federal Trade Commission
            a. can only advertise proven facts
            b. no subliminal advertising
            c. no overly exaggerated claims and promises
            d. condemnation of improper business methods
            e. against the advertising of false bargains
            f. Time Magazine--July 12, 1968 states:

> " . . . Federal Trade Commission recommended by a 3 to 2 vote that cigarette ads be altogether banned from radio and TV. The Commission specifically objected to ads that equate smoking with good times, and noted that in January alone, viewers between twelve and seventeen were exposed to a total of sixty cigarette commercials . . . "

        2. Better Business Bureau--10 rules for promoting high standards of advertising and selling.

            a. Serve the public with honest values.
            b. Tell the truth about what is offered.
            c. Tell the truth in a forthright manner so its significance may be understood by the trusting as well as the analytical.

d. Tell customers what they want to know--what they have a right to know and ought to know about what is offered so that they may buy wisely and obtain the maximum satisfaction from their purchases.
e. Be prepared and willing to make good as promised and without quibble on any guarantee offered.
f. Be sure that the normal use of merchandise or services offered will not be hazardous to public health or life.
g. Reveal material facts, the deceptive concealment of which might cause consumers to be misled.
h. Advertise and sell merchandise or service on its merits and refrain from attacking your competitors or reflecting unfairly upon their products, services, or methods of doing business.
i. If testimonials are used, use only those of competent witnesses who are sincere and honest in what they say about what you sell.
j. Avoid all tricky devices and schemes such as deceitful trade-in allowances, fictitious list prices, false and exaggerated comparative prices, bait advertising, misleading free offers, fake sales and similar practices which prey upon human ignorance and gullibility.

3. the public
   a. can refuse to buy product
   b. can complain to company about ad
   c. can write to Federal Trade Commission or Better Business Bureau in regard of ad
   d. not an effective curb on advertising
      1. rarely invoked
      2. take commercials for granted

   e. example: Rheingold beer
      1. use of ethnic groups to sell beer
      2. researched results
         a. people resented ad
         b. sales were down
      3. ad was changed

5. Suggested Class Projects:
   a. Develop a booklet of ads using each of the 7 propaganda techniques, showing how each technique is used in its respective advertisement.

b. Conduct a Motivational Research Clinic by having class actually participate in types of tests used by advertisers. Tests should be geared to high school level.
   1. round table discussion of certain products
   2. free association of product names
   3. images of products
   4. psycho-drama or role playing involving products

c. Discuss use of color in advertising. Have students give their reactions to colors.
d. Conduct test similar to that of Color Research Institute. Test same product wrapped in different color packages and discusss significance of results.
e. Class discussion of images and personalities of various products.
f. Have each member of the class select 6 products and analyze the public responsibility or lack of it displayed in their advertising campaign.
g. Have each member of the class select 2 products and write and/or draw an advertisement for it. When completed, have the class discuss public responsibility displayed in these ads.
h. Invent a hypothetical product. Divide class into groups of 3 or 4. Each group represents an advertising company trying to gain the account of this new product. Groups must create advertising campaigns revolving around product. The classroom becomes their medium. Posters, leaflets, taped broadcasts should be encouraged. Scripts for filming commercials should be created by each group. After 3 weeks the class evaluates the campaign of each group. The following criteria should be the basis of evaluation:
   1. originality
   2. responsibility and honesty
   3. importance of statements made

   One group is selected as the company that won the account of the product in question. The whole class joins this group to work on film script and eventually films their commercial.

i. Read The Hidden Persuaders by Vance Packard.
j. Read and discuss The Best TV Commercials of the Year.
k. Select an advertisement or commercial that you find particularly distasteful and write a letter explaining your dislike to the company manufacturing the product.

B. PRODUCT DEVELOPMENT

1. Early America
2. Impact of Industrial Revolution
3. Problems of Product Development
4. Creating a Market for Production
5. Necessity of a Continued Market

B. Product Development
  1. Early America
    a. new products considered ' inventions'
    b. product created to fulfill need of consumer
    c. capacity to consume greater than capacity to produce
    d. mostly necessities; few luxury products

  2. Impact of Industrial Revolution
    a. refined production units
    b. mass production
    c. automation
    d. capacity to produce overtaking capacity to consume
    e. motive for production--profit making
    f. many luxury goods

  3. Problems of Product Development
    a. saturation
      1. too many production companies
      2. market flooded with goods
      3. consumers own at least one of most marketed goods
      4. three possibilities:
        a. sell replacements
        b. sell more than one item to a family
        c. come out with new, improved model
          1. push button phones
          2. jet plane improvements
          3. color television

    b. dependence on business cycle
      1. prosperity
        a. production high
        b. consumption high
        c. full employment
        d. whole economy benefits
        e. high demand for luxury products

      2. recession
        a. consumption falls
        b. manufacturing surplus
        c. prices fall
        d. low profits
        e. employment cutback
        f. low demand for luxury products

      3. depression
        a. little production or consumption
        b. low employment rate
        c. whole economy suffers
        d. little demand for manufactured goods

      4. recovery
        a. production rises
        b. consumption rises
        c. cutback of unemployment
        d. gradual increase in demand for manufactured goods

- c. creating a marketable item
  - 1. must be demand for product
  - 2. product must fulfill people's needs
  - 3. costly errors
    - a. Ford--Edsel
      - 1. very expensive car
      - 2. big ad campaign
      - 3. very few sales
    - b. F-111
      - 1. created for Air Force and Navy
      - 2. Navy funds pulled out
      - 3. plane too heavy

4. Creating a Market for Production
   - a. inducement to buy more
     - 1. use of style
       - a. carpeting--wall to wall--sell more carpet
       - b. women's stockings--textured and colored to match outfits
       - c. sunglasses--for sport and dress wear
     - 2. use of color
       - a. tissues--to match every room
       - b. telephones
         - 1. to match rooms
         - 2. bright colors promote impulse calling
     - 3. improvements
       - a. power lawn mowers
       - b. bigger refrigerators
   - b. throw-away products
     - 1. convenience
       - a. no return soda bottles
       - b. paper plates, napkins, cups
       - c. paper clothes
     - 2. everything replaceable, as Vance Packard relates in The Waste Makers:

> "There are the soft insistant commercials the youngsters hear during their weekly twenty-odd hours of television watching. And there are the breakable plastic toys which teach them at an early age that everything in this world is replaceable."

     - 3. disposable aluminum pans
     - 4. push-button aerosol cans

- c. planned obsolescence
    - 1. "Our whole economy is based on planned obsolescence, and everybody who can read . . . should know it by now. We make good products, we induce people to buy them, and then next year we deliberately introduce something that will make those products old fashioned, out of date, obsolete . . . . It isn't organized waste. It's a sound contribution to the American economy."--Brooks Stevens, industrial designer in *The Waste Makers* by Vance Packard
    - 2. types of industrial obsolescence
        - a. obsolescence of function
            - 1. product [illegible] -- outmoded
            - 2. new product performs better
            - 3. can be very good
                - a. jet plane
                - b. color television
            - 4. can be manipulated
        - b. obsolescence of desirability
            - 1. styling change
            - 2. quality still good
            - 3. less desirable due to change
        - c. obselecence of quality
            - 1. product break down or wears out
            - 2. planned time period
- 5. Necessity of Continued Market
    - a. relationship to employment
        - 1. high production rate with steady market
        - 2 a. full employment
            - b. good wages
        - 2. low market
            - a. overproduction
            - b. low employment
    - b. effect whole economy
        - 1. full employment--economy prospers
        - 2. little employment--economy falls
        - 3. overproduction--cause of depression
    - c. effect on other countries
        - 1. international trade
        - 2. American dollar--medium of exchange
- 6. Class Projects:
    - a. Write to companies which recently developed new products. Ask how idea for product evolved, how a new market was created, and how successful product appeared to be.

b. Discuss the ethics of such tactics as planned obsolescence. Are these methods a boost to the economy or are they merely used to make money at the expense of the public?

c. Take a survey on the car-buying habits of the American consumer:
    1. Interview a random sampling of people, male and female, teen-agers, and adults, from all socio-economic classes.
    2. Discover if their last two purchases were new or used cars.
    3. Establish how many cars there are in the family.
    4. Find out how often they trade in a car.
    5. Determine why car was traded in at that particular time.
    6. Based on result of survey, discuss methods of marketing used by automobile companies.

d. Illustrate changes made in such items as cars, home appliances, TV sets, which make product obsolete. What changes might occur in the future which will out-date present products?

C. PROBLEMS OF FREE ENTERPRISE

1. Evolution of Capitalism in America
2. Prices and Profits
3. The Robber Barons
4. Business Consolidation Today

- C. Problems of Free Enterprise
  - 1. Evolution of Capitalism in America
    - a. definition and characteristics
      - 1. no central government bureau to determine amount and kinds of good produced
      - 2. means of production generally property of private owners trying to make a profit
      - 3. competition between businessmen to gain profits
      - 4. basic economic rights:
        - a. free enterprise or the right to start your own business
        - b. the right to choose your occupation
        - c. the right to enter into contracts or legal agreements
        - d. the right to own private property, to manage it, and to dispose of it as you see fit
        - e. the right to invest your money in your own business or in a business in which you buy securities
        - f. the right to save or spend your money as you choose.
        - g. the right to buy what you please within the limits of your income

    - b. beginning of American capitalism
      - 1. joint stock companies
        - a. formed to finance settlements in America
        - b. parent of American corporation
        - c. colonization involved financial risk
          - 1. 1580's--Sir Walter Raleigh
            - a. financed his own expeditions
            - b. attempted colonization at Roanoke
            - c. England gave no aid or support to colony
            - d. venture failed
            - e. Raleigh lost fortune

          - 2. after Raleigh's failure, people reluctant to invest
          - 3. sought a more secure method of investment

        - d. stock companies--relatively secure
          - 1. many people investing small amounts
          - 2. if colony successful--gain dividends
          - 3. if colony failure--lose only original investment

        - e. structure of stock companies
          - 1. charter from King for tract of land in New World
          - 2. monopoly of trade with privileges of colonization and government
          - 3. hoped for profits from land, gold, or fur trade
          - 4. raised capital to send settlers to America
            - a. sometimes stockholders themselves were also settlers

- b. some companies sent other to settle initially--"indentured servants"
  - 1. worked in American settlement for 7 years to build up land or begin a business
  - 2. dividends given to company
  - 3. after 7 years land or business turned over to stockholders
  - 4. "indentured servants" free

- f. examples of stock companies
  - 1. Virginia Company
  - 2. London Company
  - 3. Plymouth Company

- 2. Jamestown
  - a. first permanent English settlement
  - b. economy
    - 1. began as socialistic colony
      - a. all citizens produced what they could
      - b. all products put in "common store"
      - c. equal distribution of products

    - 2. system failed
      - a. no provisions for individual inititative
      - b. people not working for themselves
      - c. no incentive for improvement
      - d. production fell

- 3. Massachussetts Bay Colony
  - a. settled by Puritans
  - b. followers of Calvinism
  - c. religion and economy related
    - 1. Calvinism based on salvation
      - a. salvation can be predetermined or earned by hard work
      - b. during life--ignorant of predestinatio
      - c. members of elect unknown
      - d. all must attempt to earn salvation

    - 2. salvation earned through industry
      - a. As Edgar A. J. Johnson points out in "The Economic Philosophy of John Winthrop":

"Wealth was conceived to be a manifestation of God's bounty and God's benevolence, entrusted to men who must husband it as stewards. The Gospel law, according to Winthrop, not only sanctions, but expects men to accumulate wealth . . . Wealth, then, was a gift from a benevolent God, the acquisition of which was necessary, [illegible] for wealth was the result of man's fall from grace and his relinquishment of primitive communism. But even corruptable men must be God's stewards and therefore husband wealth for the glory of God." 14

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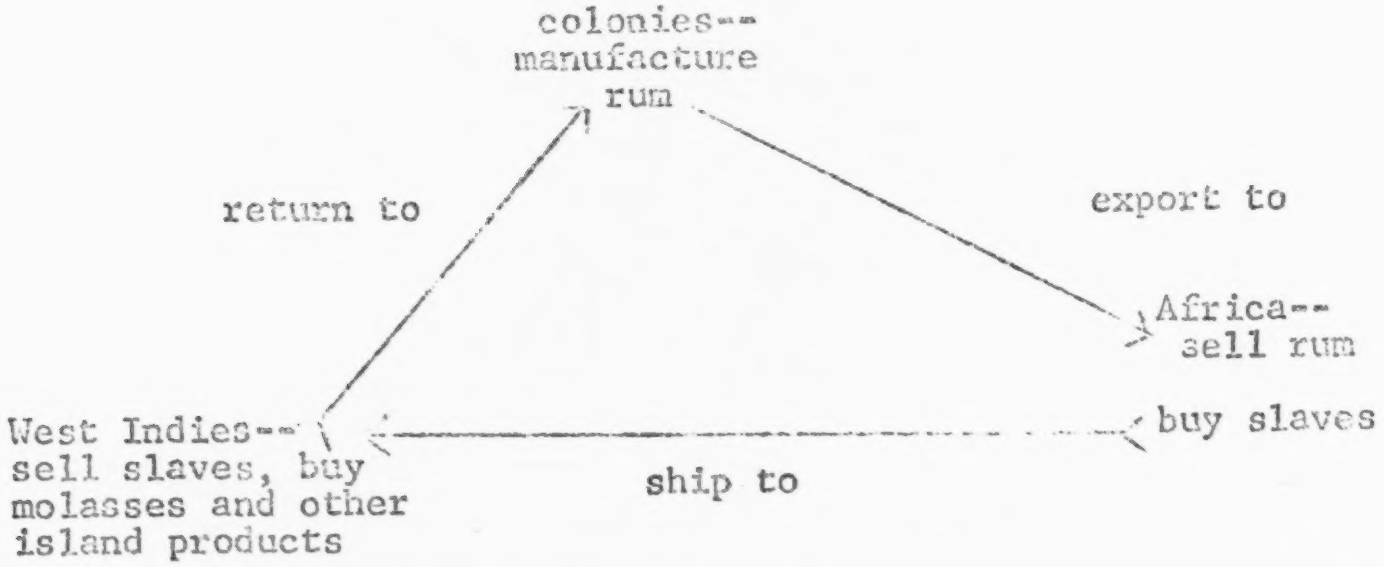
14. Nash, Gerald D., Issues in American Economic History, p. 9.

        b. accumulation of wealth
            1. sign of God's favor
            2. signifies salvation of soul after death

    3. Puritans very idustrious
        a. worked hard to gain salvation
        b. goal was individual profit making

    4. laid groundwork for American capitalism

4. Mercantilism
    a. British economic policy towards colonies
    b. theory --wealth equals power
    c. colonies existed for economic benefit of mother country
    d. virtual monopoly of trade
    e. raw materials in colonies used for manufacturing in England
    f. gradual extension to international trade
    g. triangular trade--very profitable for colonists


colonies--
manufacture
rum
return to
export to
Africa--
sell rum
buy slaves
West Indies--
sell slaves, buy
molasses and other
island products
ship to

c. growth of capitalism
    1. Constitution
        a. free trade among all states
        b. provides for free enterprise
        c. government--laissez-faire
        d. safeguards right of private property

    2. National Bank
        a. Alexander Hamilton
            1. bank would be under private ownership
            2. government--substantial shareholder
            3. create credit
            4. expand business
            5. boost to private enterprise

b. Andrew Jackson
1. bank-dangerous monopoly
2. harmful to common man
3. not a central, unifying institution
4. private commercial enterprise run for the profit of shareholders

3. Influence of frontier
a. frontier traits
1. individualism and self-reliance
a. had to adopt to changing conditions
b. struggle against forces of nature

2. democracy
a. all ethnic groups
b. all started out equally

3. ingenuity
a. new inventions needed
b. uncivilized area
c. resourcefullness required to make a living

b. 3 waves of settlers--as explained by J. M. Peck's A New Guide for Emigrants to the West (1836)
1. squatters

"It is quite immaterial whether he ever becomes the owner of the soil. He is the occupant for the time being, pays no rent, and feels as independent as the 'lord of the manor.' With a horse, cow, and one or two breeders of swine, he strikes into the woods with his family, and becomes the founder of a new county, or perhaps state. He builds his cabin, gathers around him a few other families of similar taste and habits, and occupies till the range is somewhat subdued, and hunting a little precarious, or, which is more frequently the case, till neighbors crowd around, roads, bridges, and fields annoy him, and he lacks elbow-room."15

2. settlers

"The next class of emigrants purchase the lands, add 'field to field,' clear out the roads, throw rough bridges over the streams, put up hewn log houses, with glass windows, and brick or stone chimneys, occasionally plant orchards, build mills, school houses, court houses . . . and exhibit the picture and forms of plain, frugal, civilized life."15

15, Spence, Clark C., The Sinews of American Capitalism, p.69-70.

3. capitalists

"The men of capital and enterprise come. The 'settler' is ready to sell out, and take advantage of the rise of property--push farther into the interior, and become himself, a man of capital and enterprise in time. The small village rises to a spacious town or city--substantial edifices of brick, extensive fields, orchards, gardens--colleges and churches are seen."[15]

4. post Civil War era
    a. government laissez-faire policy
    b. 14th amendment
        1. "No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property without due process of law; nor deny to any person within its jurisdiction the equal protection of the law."
        2. passed to help Negro
        3. interpreted by big business as a Constitutional upholding of laissez-faire

    c. growth of private enterprise
    d. large scale competition between companies
        1. small companies driven out of business
        2. encouraged business consolidation

    e. business consolidation
        1. causes
            a. growth of mass production due to Industrial Revolution
            b. fierce competition
            c. increasing business costs
                1. advertising
                2. salesman
                3. machinery

        2. purpose of business consolidation
            a. to achieve monopoly of industry
            b. monopoly = no competition
            c. complete control of price structure

        3. types of business consolidation
            a. pools
                1. agreement between 2 or more companies
                2. companies avoid competiton with each other
                3. apportionments of available [illegible]
                4. virtual monopoly
                5. prices go up

- b. trusts
    - 1. combination of independent corporations designed to gain control of large part of the market for that commodity
    - 2. board of trustees holds stock for member corporations and pays members dividends out of consolidated profits
    - 3. horizontal--member corporations competitors in same industry
    - 4. vertical--member corporations involved in production of same product

- c. holding companies
    - 1. corporation owns controlling portion of stock of other companies
    - 2. may be vertical or horizontal

- d. mergers
    - 1. company acquires stock of one or more other companies
    - 2. new owner dissolves other corporation
    - 3. controlling corporation absorbs resources of company taken over

4. effect of consolidation
    - a. companies cooperate at expense of public and small businesses
    - b. movement towards monopolies
    - c. small businessman cannot keep up--is driven out of business
    - d. prices driven up through lack of competition

5. legislation passed to curb consolidation
    - a. Interstate Commerce Act--1887
        - 1. to curb railroads
        - 2. provisions
            - a. just and reasonable rates
            - b. forbade personal discrimination
                - 1. no special rates
                - 2. no rebates
            - c. forbade discriminations between localities
            - d. prohibited greater charge for short haul than for long
            - e. no pooling
            - f. all rates should be printed and publicly posted
            - g. formation of Interstate Commerce Commission to administer law

3. 1897 - Maximum Freight Rate Case
a. Supreme Court Case
b. ruled that regulation of railroad rates not a power of Congress

b. Sherman Anti-Trust Act--1890
1. prohibits combinations in restraint of trade
2. forbids monopolies and attempt to monopolize
3. rarely used at first
4. enforcement
a. President Theodore Roosevelt--Northern Securities Company
b. President Taft--Standard Oil

c. Clayton Anti-Trust Act--1914
1. prohibits local price discrimination
2. no interlocking directorates
3. no contracts which forbid buyer to use goods which compete with those of the seller
e.g. United Shoe Machinery Company
a. monopoly of lasting machine
b. insisted that shoe manufacturers to whom company leased lasting machines also use its other machines
c. known as a tying contract

d. Federal Trade Commission Act--1914
1. established Federal Trade Commission
2. prevention of unfair methods of competition

2. Prices and Profits
a. the price system
1. price = amount of money given in exchange for one unit of product
2. law of supply and demand
a. price vary directly with demand
1. high demand--prices rise
2. low demand--prices fall

b. prices vary inversely with supply
1. low supply--prices rise
2. high supply--prices fall

c. equilbrium price - occurs when quantity offered equals quantity which people are ready to buy

3. overproduction--forces prices down

b. profit-making
  1. profits = net income of a business
  2. revenue minus cost equals profit
    a. revenue = income derived from sale of goods
    b. costs
      1. all expenses incurred in production of goods
      2. fixed costs
        a. do not change with quantity of output
        b. examples
          1. rent
          2. real estate taxes
          3. fire insurance on plant

      3. variable costs
        a. vary with quantity of output
        b. examples
          1. labor
          2. materials

3. factors of production
  a. land
    1. physical site of company
    2. cost - rent

  b. labor
    1. all efforts by people to create good or services
    2. cost - wages or salaries

  c. capital
    1. goods used to produce other goods
    2. all wealth except land
    3. cost - interest

  d. management
    1. ability to lead company
    2. reward for ability--profits

4. Jones'Bakery
Profit and Loss Statement - 1967

Net Income		210,000
Cost of Goods Sold	160,000	
Selling and Administrative Expense:		
Manager's salary	10,000	
Salaries of 2 salesmen @ 6,500 each	13,000	
Salary of cashier	5,500	
	28,500	
Miscellaneous expenses	5,000	
	33,500	

Total Cost of Operation			103,500
Net Operating Profit			16,500
Other income (none)			
Other expense:			
Rent		4,000	
Land	1,600		
Store	2,400		
Interest on Borrowed Capital		5,000	
			9,000
Net Profit			7,500

a. Is this an efficiently-run business? Explain.
b. Which expenses are fixed costs? Variable costs?
c. Which expenses involve the factors of production?
d. If 1968 turns out to be a bad year for Mr. Jones, how could he adjust his budget?

3. The Robber Barons
   a. methods of gaining industrial leadership
      1. introduction of new product
      2. introduction of new method of production
      3. opening of new markets
      4. new methods involving use of raw materials
      5. development of new organization of industry.

   b. these factors utilized by big business during last half of 19th century
   c. robber baron
      1. more interested in private wealth and power than in improving American economy and production
      2. lack of business ethics and social responsibility
      3. took advantage of government and people to further their own financial situation
      4. motivated by drive for power

   d. Cornelius Vanderbilt (1792 - 1877)
      1. raised new New York waterfront
      2. little formal education
      3. borrowed $100 from his mother and bought boat
         a. ferried people from island to island
         b. business grew
         c. developed into steamboat industry
         d. gradually gained monopoly
         e. sold steamboat line in 1865 for $10.000.000

4. became interested in railroads when in his late 60's--in spite of the fact that he was afraid to ride in them
5. no business scruples
6. manipulated stock--bribed legislators
7. bought New York Central, Harlem Railroad, and Hudson River Railroad--monopoly between Manhatten and Buffalo
8. moved westward and controlled most major railroad lines
9. improved railroad service
    a. steel rail
    b. standard track gauge

10. solidified railroad stock
11. estate worth about $100,000,000 at his death

e. Andrew Carnegie
    1. Scottish immigrant
    2. first job--bobbin boy earning $1.20/a week. then worked for Western Union and on railroads
    3. worked hard, saved money, impressed influential people, and accumulated capital
    4. entered steel business
        a. Bessemer process of making steel
        b. tremendous organizer
        c. know very little about steel production himself
        d. hired very capable men

    5. against monopolies and trust
    6. company was a partnership
    7. company later became U.S. Steel--first billion dollar corporation
    8. 1900--Carnegie worth about $440,000,000
    9. became a philanthropist--gave away about $350,000,000

f. John D. Rockerfeller
    1. successful businessman at age 19
    2. formed Standard Oil Corporation--1870--1st large trust
    3. elimination of middlemen
    4. destruction of competitors
    5. maintained monopoly by cutting prices until competitors went bankrupt, then raised prices rapidly
    6. forced railroads to give him large rebates
    7. by 1877--Rockefeller controlled about 95% of all U.S. oil refineries
    8. superior product manufactured
    9. In Cosmopolitan Magazine, 1907, Vol.43, pp. 368-71, John D. Rockefeller gave an interview entitled "Opportunity in America"

". . . When I was ten years old, I had succeeded in saving some money earned in various boyish ways about my native place. It was only fifty dollars, but a neighbor needed just that amount, and I loaned it to him at seven per cent interest. At about the same time I was hoeing potatoes for a farmer at thirty-seven and one-half cents a day. Well, at the end of the year I found that the money I had loaned out at interest had earned me three dollars and fifty cents. I took the interest in my hand and by an easy calculation found that it represented almost ten days' labor. From that time onward I determined to make money work for me.

The very best advice that I can give to any boy or young man is to save. There are glorious opportunities ahead for him; but how can he be ready to take advantage of them unless he has cultivated the habits of economy and prudence? He must save all he can, in season and out of season. The first experience of mine taught me a lesson that I have remembered all my life. It taught me to rely upon myself; it taught me the virtues of self-repression, of prudence, economy and self-respect . . . . . self-reliance--that ingrained sense of relying upon oneself in every emergency of life, of not having to depend upon anyone, of realizing that all one has is his reason of his own efforts. That is true independence.

Extravagance is our national curse. We make more money in the United States than do the people of any other nation in the world. But we are also more extravagant than any other people. The French are the richest people in the world because they are the most economical. They are economical not only in the matter of money, but in all things. Ride through France, you will scarcely find a foot of arable land that is not under cultivation. They economize their time, their energies, and are lavish only with their opportunities, with which they can afford to be lavish, for by economy they have prepared to take full advantage of them when they appear.

But don't conceive the vain notion that wealth is everything. No man has a right to hoard money for the mere pleasure of hoarding. I believe that the gift of money-making is imparted to a man just as the gift of poetry, or sculpture, or the art of healing is given to a man--just as one man is endowed with a genius for mechanics, another for finance, and a third for industrial enterprise. And as each of these gifts is bestowed, so must it be used for the general uplifting of humanity. That is another lesson that should be impressed upon the American youth. To make a selfish use of his opportunities is to defeat the purpose for which they were given him. Every man owes a debt to humanity, and in accordance with the manner in which he discharges that debt will he be judged.

At the beginning, the boy must look to his health; without health one can do nothing. Health is a blessing that transcends all other earthly things. The man with nothing but good health is rich compared with the man of wealth who has lost his health. Therefore, I would say to the boy who is beginning life and wants to take advantage of all the rich rewards that come from meritorious effort, guard your health. Do not sacrifice it to anything else. Get all the fresh air you can; none of the pastimes of boyhood is to be ignored. I look back upon my fishing and wood-chopping days in Ohio as the happiest of my whole life. Don't grow old before your time. Maintain an interest in life and all living things.

And then a young man must be both practical and persevering. Don't attempt to do more than you can carry out successfully; but, having taken counsel with yourself, allow nothing to stand in the way of your success, once it is planned wisely. Perseverance is the great thing. The young man who sticks is the one who succeeds. There are innumerable opportunities for the young man who knows just what he wants to do, and will do it with all his strength. Don't let your ambition run away with you. Move slowly but surely. Always obey instructions; you must learn to obey orders before you can hope to give them.

I would also say to young men, be earnest. Earnestness and sincerity are two of the sign-posts along the road to success. Inspire your employer with confidence in you. It is chiefly to my confidence in men and my ability to inspire their confidence in me that I owe my success in life.

Don't be afraid of work. The sturdy, hard-working men make our country great. And don't reach forward too eagerly. One of the great evils of the day is the anxiety of young men to get to the front too rapidly. Lasting successes are those which are carefully, even painfully, built up. Life is not a gamble, and desirable success cannot be won by the turn of a card. Be satisfied with small results at first. Cultivate a due sense of proportion. A man who is engaged as a chauffeur is expected to be a good chauffeur, not a director of a bank or the manager of a railroad. The caddy who attends strictly to business on the golf links and accurately and promptly follows the ball, is more apt to make a success of life than the bookkeeper who permits his mind to wander from his books to the work of the superintendent out in the shop . . . .

I have the utmost faith in boys. I must have, for I have the utmost faith in the future of our country. All that is needed is to awaken them to their opportunities, and for this we must depend upon our religious and educational institutions. I think a college education is a splendid thing for a boy; but I would not say that it is absolutely necessary. I hadn't the advantage of a college education; but I had a good mother and an excellent father, and I like to feel that whatever I may have lost through failure to secure a college education I made up through my home training. It is in the home circle that the character of a boy is formed. There he imbibes those principles which will follow him all through life. The home training gives him something that he can never get at college; but at the same time I am not decrying the advantages of a college education, and I should say that wherever it is possible a boy should have it.

Better than a college education, however, is the training that a boy gets in the technical schools that have sprung up all over the country. This is an age of specialization. There is an unceasing demand on every hand--in the mining industries, the railroads, the industrials, the mills, and the factories--for men with special, technical knowledge that will enable them intelligently to take up the important work that is going on. Here is a great advantage that the boy of fifty years ago didn't enjoy. Now one may enter a school and learn in his youth many of the things that the hardest kind of labor was needed to teach in bygone days. He gets the technical knowledge that enables him to begin a long way ahead of the boy of fifty years ago . . . .

I deny emphatically the assertion that opportunity has been restricted or individual effort stifled by reason of the growth of the trusts. On the contrary, the trusts have opened wider avenues and greater opportunities to the young men of to-day than those of any other generation ever enjoyed. In the old days, before the union of interests, murderous competition made any business venture precarious; but aside from that, through lack of time, opportunity, and capital, the young man was kept within a very restricted field. It is combination that has produced the capital to open up mines and factories, to build great industrial plants and the monster wholesale and retail establishments. It is combination and capital that have set the railroads shooting in a hundred different directions all over the continent. The reduction of the work of the world to scientific principles has opened possibilities for young men in a thousand different lines. And only the beginning has been made. At the beginning of our present economic era, men, brains, and ability were needed to take hold. Those men have about performed their tasks now. But who that has faith in his country will accept the theory that the work has all been done; that railroad development has reached its limit; that the steel industry can go no further; that in coal, iron, copper, lead, the industrials, agriculture, shipping, finance, the apex of development has been reached and that all this is required for the future is to steer the bark straight?

Even were this so, every generation would require thousands of young, ambitious, and vigorous men to take up the work where the retiring heads leave off. But it is not so. Our material progress, great as it has been, has only marked the beginning, and it is to the rising generation of young Americans, and to those who will follow the, that we look to carry the work along. They are the inventors of the future, the devisers of time-and labor-saving appliances, of more modern methods. They are the new executives, the future masters of finance, the creators of material wealth, and the reapers of the great reward.

> In the enlarged field which consolidation and concentration have created, there is no possible limit to the success which an ambitious young man may achieve. The demand for young men of brains, ability, and stamina is already greater than the supply. They are absolutely necessary if the great interests which have been created are not to fall into decay. Progress is the keynote . . . ."[16]

1. What events in Rockefeller's early life seemed to shape him for a business career?
2. What qualities does Rockefeller emphasize for success in business?
3. Does he think that the growth of trusts has stifled individual opportunity in America?
4. What kind of opportunities does he see in a business world that is dominated by concentration and combination?
5. Is this statement still relevant today? Explain.

g. other Robber Barons
    1. J. P. Morgan--financier
    2. James Fisk and Jay Gould
        a. financiers
        b. Erie Railroad
        c. cornering gold market--1868

    3. James J. Hill--railroad
    4. Daniel Drew
        a. financier
        b. railroad tycoon

h. the Gilded Age
    1. years following Civil War
    2. political corruption
    3. no income tax
    4. government laissez-faire
    5. economic-Darwinism
    6. lack of business conscience

4. Business Consolidation Today
    a. tight government regulation
    b. diversification of companies
        1. Ford owns Philco
        2. General Motors owns Frigidaire
        3. RCA owns Hertz-Rent-A-Car

    c. utility companies--monopolies
        1. government regulated
        2. tremendous volume of business--can afford to charge very low wages
        3. more efficient service

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[16] Rozwenc, Edwin C., and Roehm, A. Wesley, *The Entrepreneur in the Gilded Age*, p. 33-37.

5. Class Discussion:
    a. Discuss the relationship between Protestantism and Capitalism.
    b. How did our early history provide a basis for a capitalist economy?
    c. Why did efforts at socialism in the United States fail?
    d. How did large-scale competition lead to business consolidation?
    e. How did the various types of consolidation work against public interest?
    f. Discuss the advantages and disadvantages of unharnessed free enterprise.
    g. Illustrate the law of supply and demand.
    h. What were the long-range legacies of the Robber Barons to the American economic system?
    i. Could the era of the Robber Barons occur again? Why not?
    j. What factors influenced the appearance of a "Gilded Age"? Explain.

6. Class Problems and Projects:
    a. Tom is a junior in high school. For the summer he has decided to begin his own gardening services. He can work up to 40 hours a week, spending two hours on each lawn, and servicing each customer once every two weeks. To enable himself to accomodate more customers, he hired his younger brother to work with him at $1.25/hour, giving him the same type of schedule.

        Going from door to door throughout his neighborhood, Tom acquired 30 steady customers, with the understanding that his customers provide all necessary equipment.

        By advertising in his local paper, throughout the summer (8 weeks) at the rate of $10 per week, Tom received six additional customers.

        1. What is the maximum number of cutomers that Tom and his brother can handle?
        2. How much per hour should Tom charge his customers?
        3. What economic factors must Tom take into account before making this decision?
        4. Is it worth $10 a week for Tom to advertise?
        5. At the rate you have proposed, how much pure profit will Tom make per week?

    b. The Acme Pen Company produces about 100,000 pens a year and sells them for $1 per pen. On the basis of a production of 100,000 the company pays $20,000 for materials, $40,000 for labor, $5,000 for small variable expenses and $20,000 for fixed costs such as taxes, rent and interest charges.

If the company gets a moderate amount of new business, the variable costs will go up, but the fixed costs will remain the same, as long as the company is not producing at capacity.

One large wholesaler has requested an order of 10,000 pens if the Acme Company will lower its price to $.85 per unit.

1. On the basis of this information, draw up a profit and loss statement for the Acme Pen Company, clearly differentiating between fixed and variable costs.
2. What is the production cost per unit of this company?
3. Would it be economically wise to accept the order from the wholesale company? Explain.

c. Role Playing - A
   1. Divide class into seven small groups.
   2. Groups will represent different phases of industry:
      a. financial backers (1 group)
      b. suppliers (3 groups)
      c. retailers (3 groups)

   3. Groups will act out different forms of business consolidations.
   4. Movements of each group will be recorded on chalkboard.
   5. Students combining must explain why they are doing so.
   6. Class discussion of motives and methods of consolidation will follow completion of project.

d. Role Playing - B
   1. Objectives
      a. for students to see the economic principles of competition, price, and profit at work
      b. to understand business methods and business ethics
      c. to understand free enterprise system by actually taking part in it.

   2. Supplies
      a. large supply of old magazines
      b. play money in small denomination, including coins

   3. Teacher acts as banker.
   4. Class is divided into 5 groups:
      a. 1 group is supplier
      b. 3 groups represent retailers: 1 proprietor, 1 small partnership, and 1 corporation
      c. remaining group - consumers

   5. Each student businessman is given $100; each consumer is given $20.

6. Groups:

    Group I - 3 students

    a. manufacturer/supplier
    b. in charge of all magazine distribution
    c. set wholesale price per unit based on supply and demand for each type of magazine
    d. hand in worksheet explaining hypothetical cost or production, and projected profit based on prices set and supply of magazines

    Group II - 1 student

    a. proprietorship - retailer
    b. $100 assets
    c. set up business based on assets
        1. cost of magazines
        2. advertising
        3. hired help, if any

    d. set price per unit-may vary for different magazines
    e. hand in worksheet of projected profit

    Group III - 2 students

    a. small partnership - retailer
    b. assets = $200
    c. other class members may buy into partnership for $100 if one partner wishes to sell out
    d. partners set up business using same ideas as proprietor
    e. hand in worksheet of projected profit and loss statement, itemizing all costs

    Group IV - 5 students

    a. corporation - retailer
    b. assets = $500
    c. other class members may buy stock at $1 per share if one of the owners wishes to sell some of his stock
    d. set up large scale business
    e. hand in projected profit/loss statement itemizing all costs

    Group V- remainder of class

    a. consumers
    b. $20 each
    c. companies compete for large share of business
    d. consumers shop for magazines
    e. may buy into partnership or corporation
    f. each consumer hand in statement explaining advantages and disadvantages of shopping at each type of business

7. Rules
    a. laissez-faire rule
    b. object is to make money
    c. teacher takes passive role--acts as banker and may act as advisor if necessary, but students carry out activity for the most part on their own

8. Conclusion
    a. each business group hand in itemized profit/loss statement
        1. How does this compare with projected statement?
        2. If difference is large, why?
        3. How successful were you as a businessman? Why?

    b. class discussion:
        1. What factors determine success and failure in business?
        2. What business type has the best chance for success? Why?
        3. What were the advantages and disadvantages of dealing with each type of business?
        4. Do you feel that some types of business regulations are necessary? Why?
        5. Who is hurt the most by the laissez-faire philosophy? Why?
        6. What did you learn from this activity?

D. Conclusion
    1. Responsibility of Big Business to Society
        a. Economic Role of Industry?
            1. individual profit making
            2. help national economy

        b. Social Role of Industry
            1. aid in poverty program
            2. job training for culturally deprived
            3. provide for education for workers
            4. pollution

        c. Have students write to various companies requesting information on their contributions to society, and asking what role they feel industry should play.

    2. How does industry capitalize at the expense of the public?
    3. How does industry benefit the public?
    4. Do you think any new regulations are needed? Explain.
    5. What did you learn from this unit?

BIBLIOGRAPHY

Books

1. Ammer, Dean S., Readings and Cases in Economics. Boston: Ginn and Company, 1966.

2. Bailey, Thomas A., The American Pageant. Boston: D. C. Heath and Company, 1961.

3. Brink, William and Harris, Louis, The Negro Revolution in America. New York: Simon and Schuster, 1964.

4. Chamberlain, John, The Enterprising Americans. New York: Harper and Row, Publishers, 1963.

5. Dulles, Foster Rhea, Labor in America. New York: Thomas E. Crowell Company, 1960.

6. Fairchild, Fred Rogers, Understanding Our Free Economy. New York: D. Van Nostrand Company, Inc., 1952.

7. Faulkner, Harold Underwood, American Economic History. New York: Harper and Row, Publishers, 1960.

8. Jones, Maldwyn Allen, American Immigration. Chicago: University of Chicago Press, 1960.

9. Kennedy, Thomas, Automation Funds and Displaced Workers. Boston: Harvard University Graduate School of Business Administration, 1962.

10. Laslett, John, The Workingman in American Life. Boston: Houghton Mifflin Company, 1968.

11. Mandelbaum, Seymour J., The Social Setting of Intolerance. Glenview, Illinois: Scott Foresman and Company, 1964.

12. Mann, Arthur, Immigrants in American Life. Boston: Houghton Mifflin Company, 1968.

13. Mayer, Martin, Madison Avenue, U.S.A. New York: Pocket Books, Inc., 1963

14. Mayerson, Charlotte Leon, Editor, Two Blocks Apart. New York: Holt, Rinehart, and Winston, 1965.

15. Merton, Robert K. and Nisbet, Robert A., Contemporary Social Problems. New York: Harcourt, Brace, and World, Inc., 1961.

BIBLIOGRAPHY (continued)

16. Nash, Gerald D., Editor, Issues in American Economic History. Boston: D. C. Heath and Company, 1964.

17. Packard, Vance, The Hidden Persuaders. New York: Pocket Books, Inc., 1963.

18. Packard, Vance, The Waste Makers. New York: Pocket Books, Inc., 1963.

19. Rozwenc, Edwin C. and Roehm, Wesley A., The Entrepreneur in the Gilded Age. Boston: D. C. Heath and Company, 1965.

20. Salisbury, Harrison E., The Shook-Up Generation. Greenwich, Connecticut: Fawcett Publications, Inc., 1965.

21. Spence, Clark C., The Sinews of American Capitalism. New York: Hill and Wang, 1964.

22. Wilhelms, Fred T., Heimerl, Ramon P., and Jelley, Herbert M., Consumer Economics. New York: McGraw Hill Book Company, 1966.

23. Wright, David McCord, Capitalism. Chicago: Henry Regnery Company, 1962.

Magazines

1. Forbes, September 15, 1967, p. 54 - 61.

2. Time Magazine, July 12, 1968.

INDUSTRIAL PREP CHEMISTRY

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INTRODUCTION

Chemistry is a subject too often avoided by work-bound youngsters in high schools. Perhaps the main reasons are: there is a definite college preparatory design to it and more often than not, the material presented is not of interest to this group. The Industrial Prep chemistry course is an attempt to introduce students to the practical aspects of chemistry, in relation to their occupational interests and their personal environments. High school chemistry can be made interesting to most young people. Changing the method of formal presentation to one that is more laboratory oriented and deals with practical, relevant material.

The chemistry unit for the Industrial Prep Program offers a series of experiences which attempt to discipline the thinking of a youngster, while at the same time arouse a curiosity to the role of chemistry in his daily life. Much of the work is concerned with the "how" of laboratroy techniques and processes rather than the "why" of theoretical chemistry. There are more lab sessions scheduled than lecture presentations. Topics of present day interest are brought into the laboratory with experiments in air and water pollution, plant and animal conservation, analytical work on toothpastes, lipsticks, cold creams, and other personal and household products such as fabrics (both natural and synthetic.) A sizable portion of work is devoted to areas of food additives such as colorings, flavors, and preservatives.

A number of students have the opportunity to work in commercial labs, therefore, much attention is given to safety in the laboratory. Meetings held with representatives of local pharmaceutical and industrial chemistry firms help establish a priority of teaching units for the course. Concentration is placed on the following skill developing operations:

OBJECTIVES

Objectives

a. Physical measurements includung determination of melting points, spectrometry--infra-red and ultraviolet spectra, etc.
b. Use of various types of analytical balances.
c. Thin layer chromatography.
d. Titrations.
e. Performing crystalizations.
f. Performing distillations.
g. Preparation of reagents.
h. Laboratory maintenance.
i. Cleaning specialized equipment.

A good foundation can be built for fulfilling laboratory assistant training as well as offering students an interesting and rewarding science education experience with high school experience in these areas.

Unit I - Introduction to Industrial Prep Chemistry

Objective: To create an interest in chemistry and to motivate the student so that he will seek knowledge of the subject.

A. Why study chemistry?

1. There is evidence of chemistry in this room and in our daily living. The glass, the window frames (aluminum) most articles that you can see has some relation to chemistry. Chemical processes have brought us new and better things for a more leisurely living.
2. Show samples of steel, plastic, rubber, perfume, nylon, etc.
   Why are these articles important to us? How do we obtain them from nature? Chemists create new and better products. Show newer metals, medicinals, teflon; advertisements may be used in place of actual samples.

B. Chemistry as a vocation or profession.

1. What kind of work does a chemist do? Look around the room and you will find many examples showing the kind of work the chemist does. A chemists contributions to scientific discoveries may be summarized as follows: a) He makes new substances; b) He analyzes substances for their composition.

2. To avoid error in his thinking, the chemist works in a special manner, called the scientific method.
    a. He sets himself a definite problem. His problem is narrow in scope, but the question is clearly defined.
    b. He gathers as many reliable facts as he can about his problem. He can obtain facts by reading authorities, and by performing experiments. He classifies his facts and scrutinizes them carefully. With an open mind he includes all the facts, even those which may disprove some of his pet convictions.
    c. He makes a temporary guess or hypothesis. His scientific guess is based on all the facts he can possible gather.
    d. He tests his hypothesis experimentally in the laboratory. In this step, the chemist gathers more facts which have to be classified.
    e. In light of this experimentation, the chemist may modify his hypothesis. He may even discard it for a new one that will agree with the observed facts.

Student Reports

1. Make a list of five applications of chemistry that you see in your home.
2. Name three men who made significant chemical discoveries in the nineteenth century and give the contribution of each.
3. Make a report on the life of Lavoisier, Midgeley, Richards, Haber, Funk, Davy or any other notable scientist.

Unit I - Section I - Chemical Symbols

Objective: To learn the symbols and valences of some of the common elements.

A. Symbols are used in many areas instead of writing out words and phrases. This practice save time and space. The symbols and charges you are expected to know are listed below.

Element	Symbol	Charge (When is a compound)
Aluminum	Al	+3
Barium	Ba	+2
Bromine (Bromide)	Br	-1
Calcium	Ca	+2
Chlorine (Chloride)	Cl	-1
Copper I (Cuperous)	Cu	+1
Copper II (Cuperic)	Cu	+2
Fluorine (Fluoride)	F	-1
Hydrogen	H	-1
Iodine (Iodide)	I	-1
Iron II (Ferrous)	Fe	+2
Iron III (Ferric)	Fe	+3
Lead	Pb	+2
Magnesium	Mg	+2
Mercury I (Mercurous)	Hg_2	+2
Mercury II (Mercuric)	Hg	+2
Nickel	Ni	+2
Oxygen (Oxide)	O	-2
Potassium	K	+1
Silver	Ag	+1
Sodium	Na	+1
Sulfur (Sulfide	S	-2
Zinc	Zn	+2

B. Radicals

Groups of atoms that are chemically bound to each other and act as one atom are known as radicals. The following is a short list of common radicals.

Name of Radical	Symbol	Charge
Ammonium	(NH_4)	+1
Carbonate	(CO_3)	-2
Hydroxide	(OH)	-1
Nitrate	(NO_3)	-1
Nitrite	(NO_2)	-1
Sulfite	(SO_3)	-2
Sulfate	(SO_4)	-2
Phosphate	(PO_4)	-3

Please notice in the list of elements that the first letter of the symbol is always a capital and if there is a second letter it is always a small (lower case) letter.

In the case of radicals, each new element must be written with a capital letter. For instance the bicarbonate radical (HCO_3^-) has three different elements grouped together acting as one. All radicals have a charge.

Using symbols and knowing the charges (valences) we can make the formulas of many compounds. We will take up formula writing in a few weeks after we have memorized the preceeding lists.

Unit I - Section II - The Metric System

Objective: To learn the metric system for labortory measurements.

A. In the united States and Great Britain we use the foot-pound-second system of measurement rather than the metric system. But, in science, all the world including the United States and Great Britain use the metric system. The metric system is gaining a foothold here as evidenced by the weight markings on cereal boxes and volumen markings on liquid containers. The weights are marked in ounces and grams and volume markings are in quarts and liters. The calories we are concerned with in foods is a metric unit. The metric system is a decimal system similar to our money system.

1. Give each student a meter stick and have them measure the lab table, their height, books, and other materials brought to class for that purpose. Have students memorize the prefixes most used in the laboratory.

Milli = one thousandth = $\frac{1}{1000}$ = .001

1 millimeter = $\frac{1}{1000}$ of a meter = .001 m

1 milligram = $\frac{1}{1000}$ of a gram = .001 g

Centi = one hundredth = $\frac{1}{100}$ = .01

1 centimeter = $\frac{1}{100}$ of a meter = .01 m

1 centigram = $\frac{1}{100}$ of a gram = .01 g

Deci = one tenth = $\frac{1}{10}$ = .1

1 decimeter = $\frac{1}{10}$ of a meter = .1 m

1 decigram = $\frac{1}{10}$ of a gram = .1 g

Kilo = one thousand = 1,000

1 kilometer = 1,000 meters

1 kilogram = 1,000 grams

After you have memorized the prefixes and you know the rudiments of the metric system, it will be a surprise to see all the areas where we use the metric system. If you watch international sports events, especially the Olympics, you will see all measurements in the metric system.

It will be necessary for you to be able to convert the metric system to the English system of measurement (FPS) and visa versa.

It is helpful to memorize the following conversion units:

Length: 1 meter = 39.37 inches (in.)
1 inch = 2.54 centimeters (cm)
1 meter = 3.28 feet (ft)

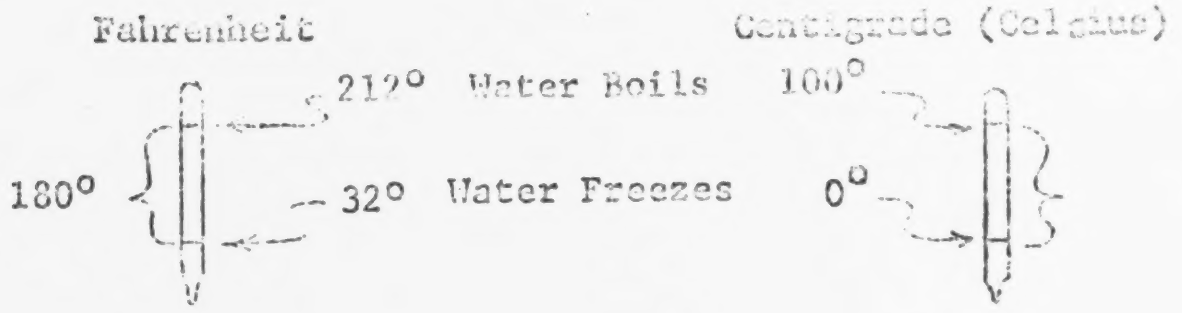
Weight: 1 kilogram = 2.2 pounds (lb)
1 pound = 454. grams (g)
approximately 28 grams = 1 ounce (oz_

Volume: 1 liter (l) = 1.06 quarts (qt)
1 quart = 946 milliliters (ml)

Time: It is measured the same all over the world.

Temperature: In the metric system the Celsius or Centigrade thermometer is used.

The temperature range between the freezing point of water and the normal boiling point of water is divided into 100 equal parts. That is, water freezes at 0°C and boils at 100°C in the metric system.



From the above comparison we can see that a 1C° temperature change is greater than 1F° temperature change. 1C° change equals 1.8F° change.

In order to convert one temperature scale to the other, use the formula below.

1. Add a +40
2. Multiply by 5/9 or 9/5
3. a. From °F to °C use 5/9
   b. From °C to °F use 9/5
3. Add a -40

Example: Change +20°C to its corresponding °F reading.

1. $\begin{array}{r} 20^\circ \\ +40^\circ \\ \hline 60^\circ \end{array}$

2. $60 \times 9/5 = 108$

3. $\begin{array}{r} 108 \\ -\ 40 \\ \hline +\ 68^\circ F \end{array}$

+20°C = +68°F

Let's now change 68°F to °C.

1. +68°F
+40
+108

2. 100 x 5/9 = +60
-40
+20°C

68°F = 20°C

Suggested Reading

Shapley, A Treasury of Science, pp. 42 - 47.

Unit II - Section I - The Nature of Matter and Change

Objective: To give the student the correct idea of matter and change matter undergoes.

A. Matter is anything that occupies space and has weight. Salt, bread, lead, water, and paper are different kinds of matter. Such things as heat, light, sound, and electricity are not considered matter since they have no weight. They are different forms of energy. The different forms of energy act on matter to produce chemical and physical changes in matter.

1. There are three states of matter: solids, liquids, and gases.

   Generally when we think of water we imagine it as a liquid. But, as you well know water can be frozen to ice (solid or boiled and turned into a vapor (gas). (Demonstrate three states of matter using moth balls.) The changes of solid to liquid and to a gas are physical changes.

Comparison of the Three States of Matter

Property	Solids	Liquids	Gases
Volume	Have a definite shape and volume.	Definite--take shape of container.	Indefinite; expands to fill container.
Molecules	Cling together firmly.	Move more freely.	More freely and separate--exert pressure.

2. There are over 100 simple substances called elements that have been discovered. The word element means a substance which has not been decomposed into simpler substances by ordinary chemical means. We are excluding nuclear reactions whereby a heavy atom is split into two simpler atoms as in the atomic bomb.

3. Complex substances are either mixtures or compounds. A compound is made up of two or more elements combined in a definite proportion by weight. A mixture is composed of two or more parts (ingredients) not bound together chemically and in no fixed proportion.

4, What are the different kinds of elements?

Elements can be separated by their characteristics. We have metals, nonmetals, and metalloids. Metalloids consist of those elements that exhibit characteristics of both metals and nonmetals. Examples of metalloids would be boron, silicon, arsenic, and antimony.

The general characteristics of metals are =

usually shinny
conducts heat
conducts electricity
can be drawn into a wire
malleable

Metals will usually combine with oxygen, either at room temperature or at higher temperatures, forming oxides.

The names of recently discovered metals end in um or ium. Sodium, calcium, potassium, and aluminum are examples of the ium and um endings. Metals such as gold, copper, zinc, and iron were discovered before this system came into use.

The characteristics of nonmetals are almost the opposite that of metals.

The general characteristics of nonmetals are:

poor conductors of electricity
poor conductors of heat
dull, waxy appearance

Recently discovered nonmetals have names which end with n or ne. Examples are oxygen, nitrogen, fluorine, chlorine, bromine, and iodine.

5. Matter is composed of small units called molecules. A molecule is defined as the smallest unit that can be recognized as a particular substance. Examples of molecules are: H_2O, Pb, C_2H_5OH, Al, and Cl_2.

The building blocks of chemistry are atoms. An atom is defined as the smallest portion of an element that takes part in chemical changes. Examples of atoms are shown on the periodic chart.

Student Projects

1. Collect samples of elements and display each in a bottle mounted on a chart.
2. Collect samples of mixtures used in the home display each in a bottle mounted on a chart.
3. Collect samples of compounds used in the house and display each in a bottle mounted on a chart.

METRIC SYSTEM B

1. 3 m= mm.
2. 30 cm.= mm.
3. 12 decimeters= cm.
4. 325 mm.= cm.
5. 10 in.= cm.
6. 1000 yd.= m.
7. 500 m= yd.
8. 10 m= ft.
9. 1.5 km.= m
10. 1. km.= ft.
11. 100 km.= yd.
12. 10 lb.= kg.
13. 10 kg.= lb.
14. 200 g= kg.
15. 3 g= mg.
16. 350 mg.= g
17. 100 ml.= l.
18. 1 L.= qt.
19. .50 L= ml.
20. 175 cc.= ml.
21. 10 ml.= cm^3
22. 2 oz.= g
23. 250 g= kg.
24. Add:

35.5 cm.
10.0 decimeters
335.0 mm.
10.0 km.
Meters

25.
225.0 mm.
.1 km.
25.0 cm.
Meters

Write the formulas for the following compounds.

Test B.

1. Hydrogen Carbonate
2. Carbon Tetrachloride
3. Copper II Oxide
4. Calcium Hydroxide
5. Aluminum Nitrate
6. Nickel II Sulfide
7. Hydrogen Acetate
8. Potassium Chromate
9. Calcium Chlorate
10. Barium Hydrogen Carbonate
11. Lead II Nitrate
12. Iron III Hydroxide
13. Magnesium Phosphate
14. Copper I Sulfate
15. Mercury I Carbonate
16. Zinc Chloride
17. Sodium Peroxide
18. Silver Sulfite
19. Potassium Bromide
20. Ammonium Sulfide

Unit III - Periodic Table, Structure of Atoms, and Formula Writing

Objective: To learn how compounds are formed from elements.

A. The Periodic Table

In 1803, Dalton stated that each element had a definite atomic weight which was the same for all atoms of that element. Attempts were made to group the elements so as to find some relationship between atomic weight and the properties of the elements.

a. Johann Dobereiner - 1829 - Triads

b. John Newlands - 1863 - Octet Theory

c. Dmitri Mendelejeff - 1869 - Periodic Law

"The properties of elements are periodic functions of their atomic weight."

He arranged the 63 then known elements in order of their atomic weights.

d. Henry Moseley - discovered a property of the elements called the atomic number by using the wave length of x-rays.

B. Structure of the Atom

1. Niels Bohr - 1913 - Electrons revolve around the nucleus.
2. Nucleus - Protons - Neutrons
3. Atomic number - the number of protons in the nucleus.
4. Atomic mass - sum of the protons and neutrons in the nucleus.
5. Show electron arrangement in energy levels.
6. Protons, positive charge - Neutrons, no charge - Electrons, negative charge.
7. Draw diagrams of various atoms - metallic and nonmetallic.

C. Formation of Compounds

1. Ionic bonding - Complete transfer of one or more electrons from one atom to another.
2. Covalent bonding - Sharing of one or more electrons between atoms.
3. Show examples of salts - $NaCl$, $MgCl_2$ and their electron transfer.
4. Show sharing of electrons in the diatomic molecules. H_2, Cl_2. Organic compounds are covalently bonded.

D. Formula Writing

If we know the number of electrons shared or given by one element and the number received by another element, we can then write the formula of the compound.

Example: $\overset{+1}{Na} + \overset{-1}{Cl} \longrightarrow \overset{+1-1}{NaCl}$ The compound is neutral.

$$\overset{+2}{Mg} + \overset{-1}{Cl} + \overset{-1}{Cl} \longrightarrow \overset{+2-1}{MgCl_2}$$

$$\overset{+2-1}{MgCl_2} = MgCl_2$$

With the list of charges memorized, we can write hundreds of formulas. It is customary to write the positive element first and the negative element second.

In some cases two or more compounds are formed by the same elements, we use a prefix in the name in order to indicate the number of atoms of the second element.

Carbon monoxide = CO

Carbon dioxide = CO_2

Memorize the following list of prefixes.

mon - 1
di - 2
tri - 3
tetra - 4
pent - 5

Name the following compounds: CCl_4, P_2O_3, P2O5, CS_2.

Unit IV - Oxygen

Objective: We will study oxygen since it is the most abundant element and illustrate characteristics of gases.

A. How and when was oxygen discovered?

1. Joseph Priestly, and English minister, is given credit for the discovery of oxygen. He heated red Mercury II Opide (Mercuric Oxide) with lens and decomposed the oxide.

   $$2HgO \longrightarrow 2Hg + O_2\uparrow$$

   He tested the gas several ways, to see if it would burn, support combustion, and sustain life. Priestly made his discovery August 1, 1774 and had his experiment published. Carl Scheele (Swedish) probably discovered oxygen in 1771 but did not write it for publication, it wasn't until after Priestly was given credit for the discovery that it came to light of Scheele's experiments.

2. Some facts about oxygen.
   1. Air is 20% oxygen by weight.
   2. Water is 89% oxygen by weight.
   3. 50% of the earth's crust is oxygen in the form of sand, clay, limestone, and rocks.
   4. A large part of living plant and animal tissue is oxygen.

   Priestly visited Lavoisier in Paris and told him of his experiments. Shortly after Lavoisier performed his famous 12 day experiment. He named the gas oxygen.

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3. Oxygen is prepared commercially by electrolysis and by fractional distillation of liquid air.

4. Physical properties of oxygen gas:

    Colorless

    Tasteless

    Slightly soluble in water

    A little heavier than air

    It can be liquified at -183°C

5. Chemical properties:

    Support combusion

    Combines with materials that burn. (Oxydation)

    $$\text{Carbon} + \text{Oxygen} \longrightarrow \text{Carbon dioxide}$$

    $$C + O_2 \longrightarrow CO_2$$

    The lowest temperature at which a substance will burn is known as its kindling temperature.

6. Factors that control the speed of oxidation:
    1. Nature of the combustible material
    2. Increase surface area
    3. Increase temperature
    4. Increase supply of oxygen

7. Conditions necessary for burning:
    1. Combustable material
    2. Supply of oxygen
    3. Combustable material heated to its kindling temperature.

    To put out a fire you must remove one of the above conditions.

Student Projects

1. Write a report on the discovery of oxygen.
2. Make a vertical diagram of the atmosphere to show how the oxygen decreases as height increases.
3. Devise an experiment to show that
    a. water contains uncombined oxygen, and
    b. water contains combined oxygen.

Unit V - Hydrogen

Objective: To learn the chemical and physical properties of hydrogen, the lightest element.

1. Hydrogen as a free gas is found on the earth in volcanic gases and in natural gas. Large amounts of it is in the atmosphere of the sun. Most of the hydrogen on earth is found chemically combined with other elements. Hydrogen is found in water, fuels, foods, and chemicals.

   Cavendish first made hydrogen from acids in 1766.

2. Hydrogen can be prepared several ways.
   a. Electrolysis of water.

      $2H_2O \longrightarrow 2H_2 + O_2$

   b. Reaction of a dilute acid and metal such as zinc or iron.

      $Zn + H_2SO_4 \longrightarrow ZnSO_4 + H_2$

      $Fe + 2HCI \longrightarrow FeCI_2 + H_2$

   c. Reaction of sodium and water.

      $2Na + 2H_2O \longrightarrow 2NaOH + H_2$

3. What are the properties of hydrogen?

   Pure hydorgen is colorless, odorless, and tasteless. It is slightly soluble in water. Its boiling temperature is -259.2°C. Hydrogen is the lightest element, weighing 0.09 g per liter. Hydrogen molecules are diatomic, that is, each molecule contains two hydrogen atoms -H_2. There are two other forms of hydrogen that differ in weight only. They are called deuterium and tritium. The different weights of the same element are known as isotopes.

4. What are the uses of hydrogen?

Hydrogen is used in the oxyhydrogen blowtorch, the atomic hydrogen torch, in fuels, and as a reducing agent.

Student Projects

1. Make a report on the graf Zeppelin--Hindenburg.

Unit VI - Water, A Typical Compound

Water is our most abundant and widely distributed compound. Three quarters of our body is water and 75% of the earth's surface is covered with water to an average depth of two and one half miles,

It also occurs:

1, In springs, lakes, and rivers.

2. In the atmosphere as vapor.

3. In common things such as cabbage, spinach and potato, up to 80%.

1. Physical properties of water.

Water can be described as a liquid, colorless, odorless, tasteless and heavy. One cubic foot of water weighs 62.4 pounds. Water freezes at $0^{o}C$ and vaporizes to steam at $100^{o}C$ at STP. Two of the most important properties of water are the way it mixes with or dissolves other substances and the fact that it expands when cooled from $4^{o}C$ to $0^{o}C$.

2. What is a solution?

The addition of sugar to coffee is a daily occurance. When sugar is put into water and dissolves the resulting mixture is called a solution. A solution is a uniform mixture (homogeneous) of a dissolved substance or solute in a dissolving liquid or solvent.

There are several kinds of solutions, depending upon the amount of solute that can be dissolved in a given amount of solvent.

1. A dilute solution has only a little solute dissolved in a lot of solvent.
2. A concentrated solution has a lot of solute in a little solvent.
3. An unsaturated solution can dissolve more solute.
4. A saturated solution contains all the solute that can dissolve at a particular temperature.

The above terms are vary general and of little use in the laboratory. The chemist must know how many grams of solute are dissolved in a certain amound of solvent. He calls these known solutions normal or molar solutions.

3. A molar solution is one that contains one formula weight of solute for each liter of solution.

Examples: Na - 23   Cl - 35.5

NaCl = 58.5 g - formula weight

Put 58.5 g of NaCl in a one liter volumetric flask and add water until the volume of the mixture is one liter. This mixture is now a one molar solution (1.M).

To make a .5M solution of NaCl, put one half the formula weight (29.25g) in a one liter volumetric flask and dilute to one liter. We can adjust the solute or the solvent in order to make any strength or volume of solution required.

Practice making the following solutions. Using NaOH as the solute, how would you make:

a. 1 liter of 1 M solution;
b. .5 liter of a 1 M solution;
c. 100 ml of a 1 m solution
d. 1 liter of a .5 M solution;
e. 2 liter of a 3 M solution;
f. 500 ml of a .1 M solution?

4. Normal Solutions

A normal solution consists of one equivalent weight per liter of solution.

An equivalent weight of a compound is the weight that will combine or replace one gram of hydrogen. The equivalent weight of a compound is found by dividing the formula weight by the total positive charge.

Examples: $\overset{+2}{H_2}\ \overset{-2}{SO_4} = 98$ = formula weight

$\frac{98}{2} = 49$ 49 g = one equivalent weight

$\overset{+}{Na}\ \overset{-}{OH} = 40$ = formula weight

$\frac{40}{1} = 40$ g = one equivalent weight

In compounds where the total positive charge is 1, a normal and molar solution are equal.

Practice making the following solution. Using $Ca(OH)_2$ as the solute, how would you make:

a. 1 liter of a 1. N solution;

b. 2 liters of a .5 N solution;

c. 200 ml of a 1. N solution;

d. 500 ml of a .5 N solution;

e. 1.5 liters of a .1 N solution;

f. 250 ml of a .25 solution?

Unit VII - The Atmosphere

Objective: The average man on the street knows practically nothing about the air. This unit will help us to learn about the air and see how the atmosphere makes the world a more comfortable place in which to live.

A. What is the composition of the air?

1. By volume air is:

78% nitrogen
21% oxygen
.9% argon
99%

The remaining .1% is made up of the remaining gases in the air such as being helium, krypton, zenon, and carbon dioxide.

B. Air is a mixture. The percents given for the composition of air vary to a slight extent. This tends to show air is a mixture since we know compounds do not vary in composition. Another difference is that parts of a mixture keep their properties while compounds attain new properties.

Air may be separated by taking advantage of different boiling points of liquid oxygen and nitrogen. If a beaker of liquid air is placed on the table it will boil vigorously. The first portion will be nitrogen because it has a lower boiling point -195°C while the temperature of boiling oxygen is about -182°C.

C. The height of the earth's atmosphere.

No one knows exactly how high the earth's atmosphere extends but scientists believe it reaches several hundred miles above the earth.

The first seven miles above the earth is known as the troposphere or turning sphere, because here the air is turbulent. This is where clouds form and cause snow, rain, and thunderstorms.

Above this region is the stratosphere. It is about 20 miles thick and the temperatures usually are between -65°F to -85°F.

There is little known about the regions extending 50 miles above the earth and more, but scientists are constantly doing studies as to improve their knowledge. There is a layer that reflects radio waves back to earth known as the Kennelly-Heaviside layer. Scientists believe that the beautiful northern and southern lights, called aurora borealis and aurora australis, occur in the outermost region of the atmosphere. These brilliant colors occur when excessive electrons are emitted from the sun and pass through the upper atmosphere.

D. Nitrogen

1. Discovered in 1772 by Dr. Rutherford.
2. Lavoisier in 1774 tested nitrogen and found it could not support life or a flame. He named it azote (without life).
3. Nitrogen is important for its uses in ammonia, dynamite, TNT, fertilizers, dyes, and enamels.

Student Projects

1. How would you prove that air is about 21% oxygen?
2. Why is carbon dioxide an important part of air?
3. What is dry ice?
4. How is carbon dioxide useful in the home?
5. What is the major use of argon?

Unit VIII - The Gas Laws

Objective: To learn the mathematics concerned with the
physical properties of gases.

A. Gases are easily compressed which indicates that there must be great distances between molecules.

1. Boyle's Law

   The volume of a dry gas varies inversely with the pressure, provided the temperature remains constant.

   $P \cdot V = P^1 \cdot V^1$

   Measurement for pressure may be one of the following:

   30 inches = 76 cm = 760 mm = 1 atmosphere = 14.7 lbs/sq. in.

B. Effect of temperature on the volume of a gas.

1. Charles' Law

   Charles discovered that for every C^{o} rise in temperature, the original volume of a gas increases by 1/273. Example: If we had 273 ml of a gas at $15^{o}C$ and incrase the temperature to $16^{o}C$, the volume would increase by 1/273 or 1 ml. The new volume of the gas will be 274 ml.

   Lord Kelvin devised a temperature scale that has no temperatures below zero. He simply called the lowest possible temperature 0^{o}.

   In order to change Centigrade temperature to Kelvin (Absolute) just add 273 to the Centigrade temperature.

Example: $20^\circ C = 20 + 273 = 293^\circ K$

$-10^\circ C = -10 + 273 = 263^\circ K$

We *must* use the Kelvin temperature scale when we use the gas laws.

Charles' Law = $\frac{V}{T(K)} \quad \frac{V^1}{T^1(K)}$

You will see the letters STP in conjunction with the gas laws, they stand for (S) standard, (T) temperature, and (P) pressure. Standard temperature is $0^\circ C$ and standard pressure is 760 mm of mercury.

Problems:

1. Change the following Centigrade readings to the corresponding Kelvin temperatures.
   $0^\circ C$, $10^\circ C$, $-200^\circ C$, $-40^\circ C$, $27^\circ C$
2. Change the following Kelvin readings to Centigrade.
   $310^\circ K$, $50^\circ K$, $273^\circ K$, $0^\circ K$, $1000^\circ K$

Problems:

1. A sample of hydrogen occupies 400 ml under a pressure of 758 mm. What is the volume at 600 mm?
2. A gas occupies 250 ml at $0^\circ C$. What will the new volume be at $100^\circ C$?

Universal Gas Law

$$\frac{P \cdot V}{T} \quad \frac{P^1 \cdot V^1}{T^1}$$

1. A sample of helium occupies 2.1 at $20^\circ C$ and under a pressure of 500. mm, what volume will it occupy at $80^\circ C$ and a pressure of 600. mm?

Unit IX - The Alkali Metals

Objective: To study chemical and physical properties of group I, the alkali metals.

A. All the metals of group I have one electron in its outermost orbit.

1. Sodium is the most important of the alkali metals.
2. It makes up 2.4% of the earth's crust. Found in compounds only.
3. Sea water is 2½% salt,
4. Also found in underground salt deposits.

B. Chemical Properties

1. Highly electropositive.
2. Sodium plus water reacts to form hydrogen and sodium hydroxide.
3. Must be kept in kerosene at all times.

C. Uses

1. Sodium vapor lights--no glare--seen through fog and mist.
2. Dyes and drugs.
3. Catalyst

D. Compounds of Sodium

1. Sodium Chloride--Used in preparation of other chemicals, preservative for butter, meat, and fish. Also put on snow and ice to thaw.

2. Sodium Hydroxide

   1. Deliquescent--absorbs water from the air.
   2. Reacts with fats, forming soap. A solution of NaOH reacts with CO$_2$ in the air to form Na$_2$CO$_3$.
   3. Bases react with acids to form water.

      $NaOH + HCl \longrightarrow NaCl + H_2O$

   4. Sodium tetraborate and Sodium Phosphate are used as water softeners.

E. Compounds of Potassium

   1. Potassium nitrate (saltpeter)

      Used in gunpowder, fireworks, explosives, and meat preservatives.

   2. Potassium Chlorate

F. Flame Tests

Sodium - yellow
Potassium - violet
Rubidium - violet
Lithium - deep red

Unit X - Acids, Bases, and Salts

Objective: To study these substances since they can be applied to our daily life. Acids, bases, and salts constitute the active chemicals which make our industrial civilization possible.

A. What is an acid?

Many people think that all acids are liquids. We use them as solutions, but more than three fourths of all acids are solids when in the pure state. Citric acid from lemons and tartaric acid from grapes are examples of solid acids. Sulfuric and nitric acids are liquids, but hydrochloric acid is its pure form in a gas.

Properties of acids:

1. Acids contain hydrogen.
2. Very dilute solution of acids have a sour taste.
3. Acids in solution turn blue litmus red.
4. Some acids react on certain materials, some do not.

Three common acids:

1. Sulfuric acid or oil of vitriol, H_2SO_4
2. Nitric acid or aqua fortis, HNO_3.
3. Hydrochloric acid or muriatic acid, HCl.

B. Why is sulfuric acid so important?

No chemical manufactured has as many uses as sulfuric acid.

Sulfuric acid is used in making:

1. Futilizers
2. Explosives
3. Dyes
4. Drugs
5. Perfumes
6. Artificial silk
7. Other acis and chemicals

Contact process for making sulfur.

1. Sulfur is burned to make sulfur dioxide.

   $S + O_2 \longrightarrow SO_2$

2. Now we must make sulfur trioxide. When a mixture of SO_2 and air is brought in "contact" with powdered platinum heated to about 400°C; sulfur trioxide is formed.

   $2SO_2 + O_2 \xrightarrow{\text{platinum}} 2SO_3$

   Vanadium oxide is now used as the catalyzer.

3. The third step looks simple, since sulfur trioxide will react with water to make sulfuric acid.

   $SO_3 + H_2O \longrightarrow H_2SO_4$

   This method is not satisfactory since pure water acts very slowly in absorbing the sulfur trioxide fumes. But, sulfur trioxide is quickly absorbed by a solution of 97% sulfuric acid and 3% water.

   $SO_3 + H_2SO_4 \longrightarrow H_2SO_4 \cdot SO_3$ (Fuming sulfuric acid or oleum)

   This fuming sulfuric acid dissolves in the 3% of water to form 100% sulfuric acid.

   $H_2SO_4 \cdot SO_3 + H_2O \longrightarrow 2H_2SO_4$

   It is by this method that the 100% acid is prepared.

B. Nitric Acid

Nitric acid is usually prepared by the action of sulfuric acid on sodium nitrate.

$NaNO_3 + H_2SO \longrightarrow NaHSO_2 + HNO_3$

There is no apparent change since the action is reversible. When the mixture is heated, the nitric acid will be distilled off first since nitric acid has a much lower boiling point than sulfuric acid.

C. Properties

1. Unstable
2. Depending on concentration, it may boil at 86°C to 120°C.
3. When the 100% acid boils, it decomposes,

$4HNO_3 \longrightarrow 2H_2O + 4NO_2 + O_2$

D. Uses

1. 75% of the acid is used in making explosives.
2. Dyes
3. Lacquers
4. Films
5. Nitrates and other chemicals

E. Hydrochloric acid.

Hydrochloric acid is prepared, both in the laboratory and on a commercial scale, by heating a mixture of common salt and sulfuric acid.

$2NaCl + H_2SO_4 \longrightarrow Na_2 SO_4 + 2HCl$

The hydrogen chloride gas is dissolved in water to make hydrochloric acid.

F. Uses

1. In plating metals.
2. Clean brick, tile, and porcelain.

Section II - Bases

A. What are bases?

Bases are compounds that contain one or more hydroxide radicals and turn red litmus blue.

Examples of bases are:

$NaOH$, lye

$Ca(OH)_2$, limewater

$Mg(OH)_2$, milk of magnesia

NH_4OH, ammonium hydroxide ("ammonia")

B. Properties

1. All bases contain the hydroxide group.
2. Very dilute solutions have a bitter taste.
3. Bases in solution turn red litmus blue.

   (base to blue)
4. Some bases, such as sodium hydroxide, dissolve wool.

C. Calcium hydroxide.

Calcium hydroxide is a base made from lime.

$$CaO + H_2O \longrightarrow Ca(OH)_2$$

lime + water ⟶ slaked lime

D. Sodium hydroxide.

This substance is commonly sold as "lye". It is the strongest of the common bases. Its most important uses are in:

1. Making soap
2. Refining petroleum
3. Making other chemicals
4. Making rayon
5. Pulp and paper industry

E. Preparation

We can make sodium hydroxide in the lab by the action of sodium and water.

$$2Na + 2H_2O \longrightarrow 2HaOH + H_2\uparrow$$

F. Ammonia water.

Ammonia used in cleaning is a dilute solution of ammonia gas in water.

$$NH_3 + H_2O \longrightarrow NH_4OH$$

The formula NH_4OH is a true base which will dissolve fats and oils, hence a good household cleanser.

Section III - Salts

A. What is a salt?

If we add just enough hydrochloric acid to a solution of sodium hydroxide and neutralize each other, we will obtain a salt and water.

$$HCl + NaCl + H_2O$$

All we need do is evaporate the water and the salt remains.

A salt is formed by neutralizing an acid with a base.

A salt is a component of a metal and an acid radical.

Acid	**Salt**
HCl	$NaCl$
HNO_3	$NaNO$
H_2SO_4	Na_2SO_4
H_2SO_4	$MgSO_4$

B. How is salt extracted?

In warm countries, such as India, evaporation of sea water is the method used.

There are salt mines in some countries where salt can be mined in much the same manner as coal.

Much of the salt used in this country is from salt wells. These wells are drilled in the same manner as oil wells. When the salt deposit is reached, water is forced down to dissolve the salt, and the brine is pumped up. The solution is evaporated to form crystals of salt. By re-dissolving the salt and re-crystallizing, the purity of the salt is increased.

Salts generally don't affect litmus but if a salt is made from a strong acid and a weak base, the salt will turn blue litmus red. If a salt is made from a weak acid and a strong base, it will turn red litmus blue.

Student Projects

1. Test five liquids used in the home with litmus paper. Report your findings.
2. Test the saliva in your mouth with litmus. Is it acid, basic, or neutral. What should it be?

Unit XI - Types of Chemical Reactions

Objective: To learn the four general types of chemical reactions.

A. Every Chemical reaction has a chemical equation. Since there are thousands of chemical equations, it is not necessary to memorize these reaction equations. It is much more sensible and important to know how to use these equations. It is reasonable, though, to expect you to be able to write simple equations. But, we must keep in mind that in our Industrial Prep Chemistry, we are working for understanding rather than memorizations of facts.

There are four general types of chemical equations:

1. combination
2. decomposition
3. single replacement
4. double replacement

B. Combination:

In this type of reaction simple substances unit to form more complex ones. Elements may unite with elements; or elements may unit with compounds.

The general formula for this type of reaction is:

$$A + B \longrightarrow AB$$

Examples:

1. $Cu + S \xrightarrow{\triangle} CuS$
2. $2Mg + O_2 \xrightarrow{\triangle} 2MgO$
3. $CaO + Cl_2 \longrightarrow CaOCl_2$ (calcium oxychloride or bleaching powder)
4. $CaO + CO_2 \longrightarrow CaCO_3$

C. Decomposition:

In this type of reaction, complex substances are broken down into simpler substances.

General formula: $AB \longrightarrow A + B$

Examples:

1. $2H_2O \xrightarrow{\text{elec.}} 2H_2 + O_2$
2. $2HgO \xrightarrow{\triangle} 2Hg + O_2$
3. $2KClO_3 \xrightarrow[MnD_2]{\triangle} 2KCl + 3O_2$

D. Single Replacement:

In such reactions, one element takes the place of another element in a compound.

General formula: $A + BC \longrightarrow AC + B$

$A + BC \longrightarrow BA + C$

Examples:

1. $Cu + 2HgNO_3 \longrightarrow Cu(NO_3)_2 + 2Hg$
2. $Fe + CuSO_4 \longrightarrow FeSO_4 + Cu$
3. $Zn + H_2SO_4 \longrightarrow ZnSO_4 + H_2$
4. $Cl_2 + 2NaBr \longrightarrow 2NaCl + Br_2$

E. Double Replacement:

These reactions are a double exchange reaction between compounds.

Examples:

1. $NaOH + HNO_3 \longrightarrow$
2. $BaCl_2 + H_2SO_4 \longrightarrow$
3. $HCl + AgNO_3 \longrightarrow$

Unit XII - Foods

Objective: In earlier times man ate food to sustain life. He probably ate only those foods which he enjoyed. This manner of eating often resulted in dietary deficiency diseases. For example, if he avoided milk in his diet, certain bone diseases such as rickets occurred. Skeletons of ancient man definitely show the prevalence of this disease.

As civilization progressed, man's food habits have not always improved. The increased use of soft foods has led to the decreased use of teeth. This results in poor teeth. But less civilized people who use harder, rougher foods have good teeth even in old age.

Today, nutrition is an exact science. To meet economic necessity during war and famine conditions, for families with limited incomes, for heads of hospitals and other institutions, a real knowledge of the essentials of nutrition is absolutely necessary. Every educated layman needs to know certain simple food principles.

A. What is a food?

A food is any substance taken into the body to (1) promote growth, (2) replace worn out tissue, (3) produce heat and energy for doing work, or (4) regulate the body processes, such as digestion and assimilation.

B. What are nutrients?

Nutrients are the essential food constituents. The important classes of nutrients in food are:

1. Carbohydrates
2. Fats and Oils
3. Proteins
4. Minerals
5. Vitamins

I. Carbohydrates

Starch $(C_6H_{10}O_5)_n$, and sugar $(C_{12}H_{22}O_{11})$, are examples of carbohydrates. This class of compounds contain carbon, hydrogen and oxygen in which hydrogen and oxygen are in the same proportion as in water, H_2O.

Carbohydrate foods:

1. Potatoes
2. All cereals
3. Candy, cake, and other sweets
4. Small amounts of fruits, vegetables, and nuts

II. What are sugars?

There are many sugars known, but sucrose, glucose, maltose, fructorse, and lactose are the most important.

A. Sucrose is the scientific name for cane sugar, beet sugar and maple sugar. These sugars are identical and have the same formula $C_{12}H_{22}O_{11}$. This is ordinary table sugar.

Sugar cane grows best in the tropics. Cuba, Puerto Rico, and Hawaii are principle producers. The sugar beet, however, grows in cooler climates. Colorado, Nebraska, Michigan, Ohio, and other states produce large quantities of beet sugar.

Saccharin, $C_6H_4COSO_2NH$, is a substance derived from coal tar. It is about five hundred times sweeter than sucrose. Its formula shows that it is not a carbohydrate and it has no food value.

B. Glucose, $C_6H_{12}O_6$, is also called grape sugar, since it is found in grapes. Commercially, glucose is made from starch. A little hydrochloric acid is added to act as a catalyzer and the starch solution is gently boiled, causing this change:

$$C_6H_{10}O_5 + H_2O \xrightarrow{HCl} C_6H_{12}O_6$$

starch + water → Glucose

The acid is neutralized by adding just the right amount of soda, and the small amount of salt which is formed and is left in the syrup or glucose.

Glucose is used in:

1. Manufacturing candy, syrup
2. Jams, jellies, preserves
3. Soft drinks
4. Beer
5. Chewing tobacco

C. Maltose, Lactose - $C_{12}H_{22}O_{11} \cdot H_2O$

Sucrose, maltose, and lactose have the same basic formula but they differ in properties because they have different molecular structures. There is also another slight difference: lactose and maltose contain water of crystallization, while sucrose does not.

Malt is sprouted barley. During the sprouting process, an enzyme is formed which changes the starch to sugar, maltose.

Milk contains about 5% of lactose, which is called milk sugar. It is not as sweet as sucrose but it has properties which make it useful in preparing medicinal tablets and sugar coated pills.

III. What are fats?

A. Fats are compounds of carbon, hydrogen, and oxygen but the proportion of H to C is not the same as in carbohydrates. Fats are sometimes called organic salts since they are composed of acids and glycerol. For example, stearin, a fat contains stearic acid combined with glycerol. Its name is glycerol sterate, $C_3H_5(C_{18}H_{35}O_2)_3$.

No natural fat is a single compound. They are all mixtures.

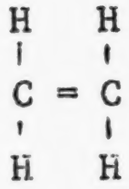
B. How are fats useful to the body?

Fats are excellent fuels which yield twice the heat and energy as carbohydrates per gram. Fats also protect tissues and organs and are the reserve food supply for the body.

C. Hydrogenation

Hydrogenation is a process by which hydrogen is added to liquid vegetable oils and fish oils to turn them into solid fats. This process changes the unsaturated oil into saturated fats.

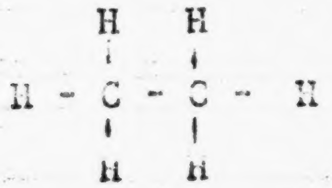
Unsaturated compound:



$$\begin{array}{ccc} H & & H \\ | & & | \\ C & = & C \\ | & & | \\ H & & H \end{array}$$

C_2H_4

Saturated compound:



$$\begin{array}{ccccccc} & & H & & H & & \\ & & | & & | & & \\ H & - & C & - & C & - & H \\ & & | & & | & & \\ & & H & & H & & \end{array}$$

C_2H_6

IV. What are proteins?

A. Proteins are called body builders, they replace tissue in the body. Plants can build up protein from simpler substances. Proteins cannot be made by the body from carbohydrates and fats. We must eat protein food such as lean meat, eggs (white), cheese and fish. During the digestion process, proteins are broken down into amino acids. Amino acids are organic acids that contain at least one NH_2 radical in the formula. Amino acids are carried by the blood to various parts of the body and reassemble themselves into proteins.

V. Minerals

A. Minerals are found in most foods. Life is not possible without them. Without minerals no animal can grow and reproduce its kind. Some minerals are essential for digestion, respiration, resistance to disease, regulation of the heart, and clotting of blood.

B. What are the uses of minerals in foods?

Blood contains iron. The hemoglobin of the red corpuscles need iron to transport oxygen from the lungs to all parts of the body. Bones are largely calcium phosphate. Each of the elements in salt, NaCl, is useful. Sodium is the basis for salts found in the bile. And chlorine is used in the stomach to form hydrochloric acid, HCl. These fluids are essential to digestion hence we can see why animals search for salt licks. Iodine is needed by the body to prevent goiter. Fortunately the food rich in these minerals are easily found in the market.

1. Calcium found in milk, cheese, vegetables, peas, and beans.
2. Phosphorus found in milk, cheese, eggs, beef, and beans.
3. Potassium found in milk, vegetables, and cereals.
4. Sodium found in salt, butter, fish, and meat.
5. Chlorine found in table salt.
6. Magnesium found in milk, eggs, chicken, and beans.
7. Iron found in beans, eggs, raisins, lean meat, and whole wheat.
8. Iodine found in sea food, drinking water, and iodized salt.

VI. Vitamins

A. Vitamins are organic compounds that prevent certain diseases and assist in regulating some of the body processes.

In 1772 James Lind, and English surgeon, discovered that citrus fruits, such as lemons and limes, would prevent scurvy. Hence, the name limey for the English. Swollen joints, bleeding gums, and loosened teeth are symptoms of scurvy.

B. We cannot store most vitamins in our body so we need a certain amount daily. Standard units called international units are used in measuring vitamin requirements. This unit differs for each vitamin. One unit of:

Vitamin A equals 0.6 micrograms (micro = millionth)
Vitamin B_1 equals 3.3 micrograms
Vitamin C equals 50.0 micrograms
Vitamin D equals .025 micrograms

C. Vitamin A

Vitamin A in its pure form is a pale yellow, thick liquid having the formula $C_{20}H_{29}OH$. Vitamin A is stored in the liver. Lack of this vitamin causes slow growth, poor bones, poor teeth, night blindness and nervous irritability. The body changes carotene, the yellow pigment in vegetables, into Vitamin A. Foods rich in Vitamin A are liver, carrots, tomatoes, sweet potatoes, and dairy products.

D. Vitamin B complex:

B_1, Thiamine deficiency leads to beriberi and neuritis attacks. The best source of thiamine is brewer's yeast and wheat germ. It is also found in leafy vegetables.

B_2, Riboflavin is a solid and its formula is $C_{17}H_{20}O_6N_4$. This vitamin aids in the digestion of carbohydrates and prevents certain skin disorder.

Niacin prevents pellagra (disorder of the skin).

Foods rich in Vitamin B are liver, pork, chicken, corn, wheat, peas, nuts, milk.

E. Vitamin C, aecorbic acid.

Vitamin C prevents ecurvy and is found in citrus fruits, tomatoes, cabbage, and lettuce.

F. Vitamin D

Vitamin D, the sunshine vitamin, is made in the body by ultra-violet rays from the sun acting on ergesterol and cholesterol. None of our foods is a good source of this vitamin; it is usually obtained from fish liver oil. A lack of Vitamin D interferes with the body's chemical balance and with its use of the calcium and phosphate group. This upset affects the growth of bones and teeth and is known as rickets.

UNIT XIII ORGANIC CHEMISTRY

Introduction:

The name "organic chemistry" was originally proposed as a name for the branch of chemistry which deals with a group of compounds which were thought to be produced only by living organisms. When Wohler, in 1828, succeeded in making urea, a compound in urine, it was the beginning of a new concept of organic chemistry.

Our bodies are composed principally of organic compounds and water. Our foods are organic compounds. Moreover, with the exception of the development of atomic energy and its related chemistry, the greatest recent increase in chemical knowledge has been in organic chemistry. Considering these facts, one must know something about organic chemistry to be a well-informed person.

A. Sources of organic compounds

Many organic compounds are obtained from plant and animal products by suitable processing. Examples of materials so used are coal, crude oil, corn stalks, hides, bones and hair. Many of the materials now used were formerly regarded as wastes.

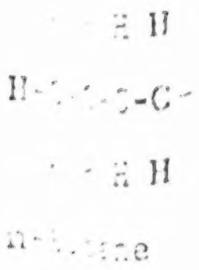
No-one knows exactly how many organic compounds have been discovered, but the number is about 1 million and is increasing rapidly. All the other compounds number about 35,000.

B. Why are there so many carbon compounds?

One of the principal reasons why carbon compounds are so numerous is that carbon atoms have the ability of linking together in chains, rings, or other shapes by sharing electrons with adjoining carbon or other atoms.

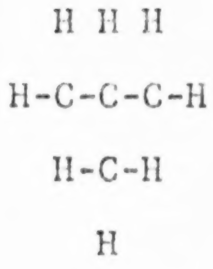
The ease with which carbon atoms link with other atoms often results in the formation of two or more entirely different compounds having the same empirical formula. Such compounds are called isomers.

[illegible] H_{10}



$$\begin{array}{c} \text{[illegible] H} \\ \text{H-[illegible]-C-} \\ \text{[illegible] H} \end{array}$$

n-[illegible]



$$\begin{array}{c} \text{H H H} \\ \text{H-C-C-C-H} \\ \text{H-C-H} \\ \text{H} \end{array}$$

Isobutane

C. How are organic compounds and their reactions different from inorganic compounds and their reactions?

A large proportion of inorganic compounds are soluble in water, but a majority of organic compounds dissolve only in such solvents as alcohol, carbon disulfide, ether, acetone, and chloroform.

As a group, organic compounds are easily decomposed by heat, while many inorganic compounds do not decompose easily by heating.

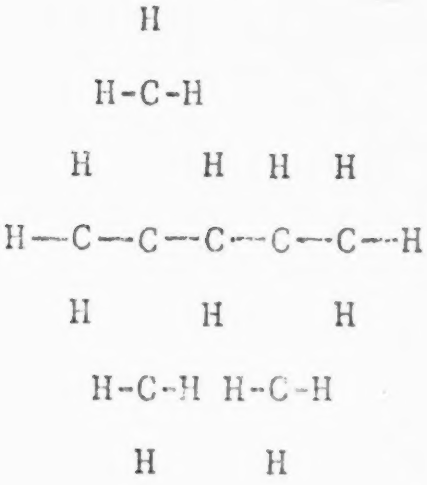
Chemical reactions between some organic substances are very slow because they are not ionized in solution, whereas reactions between electrolytes are almost instantaneous because of the attraction between oppositely charged ions.

Some organic compounds are ionized in solution, and the speed of reaction is proportional to the degree of ionization. In general, organic compounds are ionized to a lesser degree than inorganic compounds.

D. How are hydrocarbons named?

By studying the compound isoctane, we can learn a little about the naming of hychocarbons.

The following isomer of n-octane is called 2,2,4-trimethylpentane.



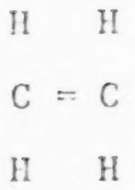
$$\begin{array}{ccccccccccccc} & & & & \mathrm{H} & & & & & & & & \\ & & & & \mathrm{H{-}C{-}H} & & & & & & & & \\ & & \mathrm{H} & & & & \mathrm{H} & & \mathrm{H} & & \mathrm{H} & & \\ \mathrm{H} & — & \mathrm{C} & — & \mathrm{C} & — & \mathrm{C} & — & \mathrm{C} & — & \mathrm{C} & — & \mathrm{H} \\ & & \mathrm{H} & & & & \mathrm{H} & & & & \mathrm{H} & & \\ & & & & \mathrm{H{-}C{-}H} & & & & \mathrm{H{-}C{-}H} & & & & \\ & & & & \mathrm{H} & & & & \mathrm{H} & & & & \end{array}$$

In the formula the carbon atoms in the chain may be numbered 1 to 5 from the left. A chain hydrocarbon is named from the longest chain of carbon atoms. Since there are five carbons in the longest chain in issoctane, it can be considered a pentane. Trimethyl indicates that there are three methyl, CH_3, groups attached to carbon atoms in the chain. The numbers preceding trimethyl indicate the points of attachment of these groups. The name 2,2,4-trimethylpentane means that there are five carbon atoms in the chain and that there are three methyl groups; two attached to the second carbon atom and another attached to the fourth carbon atom.

A few of the common radicals which you are likely to see in names of hydrocarbons are CH_3-methyl, C_2H_5-ethyl, C_3H_7-propyl, C_4H_9-butyl, and C_5H_{11}-amyl.

E. What is an unsaturated hydrocarbon?

Another series of hydrocarbons is called the ethylene series. Members of this series can be obtained by cracking petroleum. Ethylene, propylene, and butane are the first three members of this series. The general formula is C_nH_{2n}.



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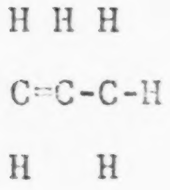
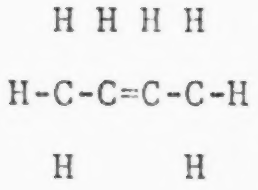
Ethylene



$$\begin{array}{ccccccc} H & & H & & H & & \\ C & = & C & - & C & - & H \\ H & & & & H & & \end{array}$$

Propylene



$$\begin{array}{ccccccccccc} & & H & & H & & H & & H & & \\ H & - & C & - & C & = & C & - & C & - & H \\ & & H & & & & & & H & & \end{array}$$

2-Butene

In each member of the series there is one pair of carbon atoms which is joined by a double covalent bond. Since we can form a new compound by the addition of certain atoms, this series is unsaturated.

Safety In The Laboratory

To keep the laboratory a safe place in which to work, certain rules must be followed by everyone in the lab without exception.

Rule 1. DO NOT FOOL AROUND

The laboratory was not designed as a playground and the following should be avoided.

1. running
2. shouting
3. throwing objects
4. pushing
5. punching
6. pinching
7. dancing
8. general horseplay

Sooner or later one of the following will happen if you food around.

1. Chemicals will be upset.
2. Equipment will be broken.
3. Persons will be injured.
4. Experiments will be ruined.

Rule 2. KEEP THE LABORATORY CLEAN

A dirty laboratory is unsightly and unsafe.

1. Sweep up all broken glass at once.
2. Pack up off the floor anything which may cause someone to trip.
3. Clean up all spills of water or chemicals immediately.
4. Place apparatus and chemicals away from the edge of the laboratory tables.
5. Put away all apparatus and chemicals which are not being used.
6. Return all chemicals to the reagent shelf promptly.

7. Put all waste materials in the containers provided.
8. Flush the sink well with water after disposing of chemicals.
9. Dispose of unlabelled chemicals.
10. Use common sense.

Rule 3. HANDLE GLASSWARE PROPERLY

Cuts from broken glassware outnumber all other injuries in the laboratory. And, most accident happen because glassware was not handled properly.

Broken skin is an open door for bacteria and poisonous chemicals.

DO NOT:

1. Force a thistle tube or glass tubing into a stopper.
2. Force a stopper into a flask or bottle.
3. Use cracked glassware.
4. Use chipped glassware.
5. Bang glassware on stone table tops.
6. Clean glassware too vigorously.
7. Cause sudden changes in temperature when using glassware.

To avoid these accident PLEASE:

1. Don't use cracked glassware.
2. Polish chipped glass with a flame or emery cloth.
3. Clean glassware cautiously.
4. Use pyrex glassware where possible.
5. Use the correct method of putting glassware into stopper.
6. Use correct method of removing glass stoppers which are stuck.
7. Use the "hand saver" to remove glass tubing stuck in a stopper.

Rule 4. TREAT ALL CHEMICALS WITH RESPECT

Many dangerous chemicals appear perfectly harmless. For example, nitroglycerine is a colorless, oily liquid, which does not seem dangerous. And yet we know of the tremendous explosion which results when nitroglycerine is set off. The fumes from carbon tetrachloride have a delayed reaction. There is no bad effect while the fumes are bing inhaled, but don't be fooled, Those fumes are being absorbed into the body and doing damage to the liver. Other chemicals react very rapidly. Carbon monoxide has no odor, no color, and no taste. Yet death will result in a very short time and from very small doses. Be careful, take no chances.

There are three ways poisons can enter the body.

1. Inhaled through the nose and mouth into the lungs.
2. Swallowed through the mouth into the stomach.
3. Absorbed through the skin into the bloodstream.

To prevent poisons from entering the body do the following:

1. Keep all chemicals which produce fumes in the hood.
2. Do not eat when working with chemicals.
3. Do not drink from laboratory glassware.
4. Do not taste chemicals.
5. Do not keep food where it can come in contact with chemicals.
6. Wear laboratory apron and goggles.
7. Wash your hands thoroughly after handling chemicals.
8. Keep your laboratory table clean at all times.

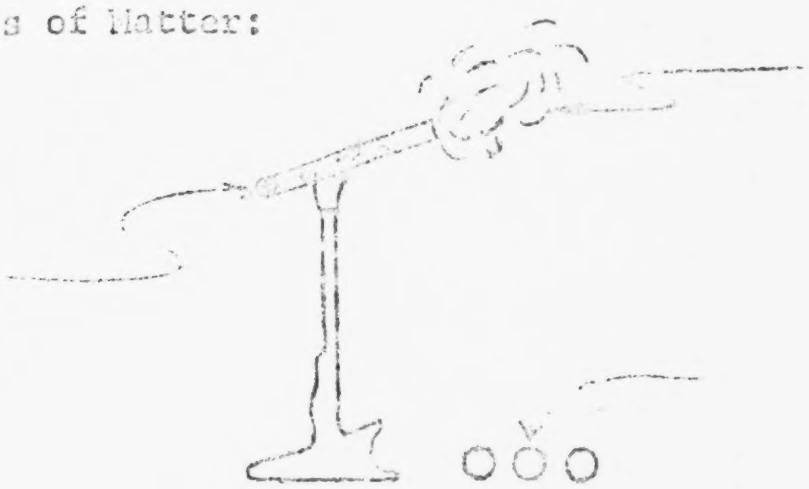
Rule 5. USE WATER PROPERLY

Water is as necessary in laboratories as it is for human life. But, there are certain conditions under which water can be dangerous.

1, Water spilled on the floor can cause someone to fall.
2. Water squirted by mouth, hose, or wash bottle can cause a surprised victim to spill dangerous chemicals.
3. Water coming in contact with electrical apparatus can cause electrocution.
4. Water poured into acids and certain chemicals can cause explosions.
5. Water put on buring oil causes the fire to spread.

Demonstrations

Three States of Matter:



Naphthalene or paradichlorobenzene, sold as moth balls are excellent for showing the three states of matter. Using water is not as good because the students cannot see or smell water vapor.

Catalysis:

1. Heat about 8 - 10 g of $KClO_3$ in a hard glass test tube. Test for oxygen with a glowing splint. When oxygen is evolved stop heating and withdraw the splint. Add a spatula of MnO_2 and these for oxygen again. The reactions resumes without additional heat.
2. Manganese dioxide maybe used with Hydrogen peroxide to release oxygen to again show a positive catalyst.
3. Iron III oxide is a catalyst in the presence of Potassium Chlorate.

Electrical Nature of the Atom:

1. Rub a rubber rod with cat's fur. The rod is now negatively charged. Test it with a pith ball. Show attraction then repulsion. Show the cat's fur carries the opposite charge. The explanation should be in relation to the mobility of the electrons and stationary protons.

How to Write Experiment Reports

Name ______________________ Period

Date ______________________

Number and Title of Experiment

Purpose: ______________________

Materials: ______________________

Procedures	Results and Observations
May take several pages.	May take several pages.

Conclusion:

Experiment 1

Laboratory Observation and Description

Purpose: To observe and describe accurately in a scientific manor.

Many of us think we see and observe all in our field of vision. But, there is much more to observation than just seeing. It takes concentration, intelligence, and patience.

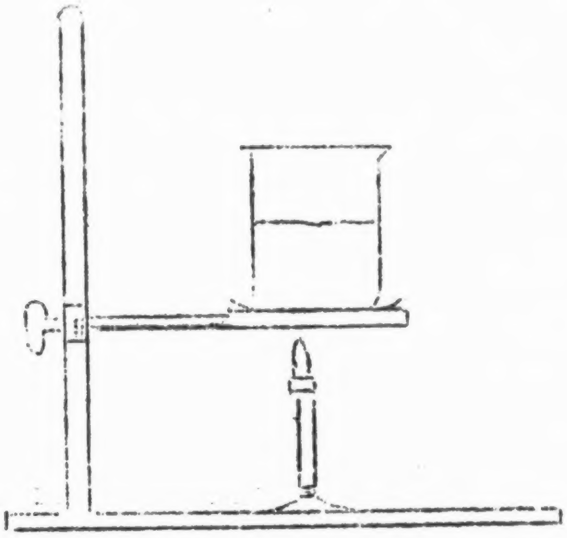
Let us see how good you are at writing a description of a familiar object, boiling water. Be careful since we must note all conditions and surroundings that may affect our experiment. It is important that we learn which conditions are critical here. Important conditions may change with each experiment. The following is a small list of trivial and important conditions pertaining to this experiment only. This is a partial list since we don't want to give any answers away as yet.

Trivial	Important
The sun is shining brightly.	Method of heating water.
Experiment done at night.	Type of container.
It is raining.	Source of water.
The room is cool.	Source of heat.

Procedure

You have the use of all laboratory equipment in your locker and if you should want other equipment ask your instructor.

Set up your apparatus as shown. Use an amount of water that you deem sufficient.



1. Examine water and equipment carefully.
2. Light burner.
3. Let water boil for 10 - 15 minutes.
4. Record your observations from the time you start to the end of the experiment.

Some suggested observations.

1. Weight of water before heating.
2. Volume of water before heating.
3. Temperature of water before heating.
4. Clean colorless liquid.
5. Weight of water after heating.
6. Volume of water after heating.
7. Temperature of water while boiling.
8. Time it took to boil.

9. Deposits on container after boiling.
10. At boiling water is turbulent.
11. After adding objects or more water--it stops boiling momentarily.
12. Water condences on objects held above boiling water.
13. Boiling temperature is constant.
14. Boiling temperature is higher with dissolved material in the water.
15. No odor.
16. Mist forms and dissappears.
17. Bubbling sound when boiling,
18. Bubbles start at the bottom and go up.
19. Bubbles enlarge.
20. Boiling can be fast or slow.

Experiment 2

Laboratory Techniques

Purpose: To become familiar with common laboratory equipment and their proper use.

Read directions of the entire lab before proceeding.

1. Bunsen burner. The burner is one of the most important piece of lab equipment. Its proper use and care will save you many minutes during your lab period.

1.1 To light the burner, hold a lighted match just above the barrel and a little to one side. Your hand should be below the barrel.

1.2 Turn the gas on all the way.

1.3 Pass the match (not your hand) over the barrel.

If the flame is yellow (a luminous flame) there is not enough air. Turn the barrel so that more air is mixed with the gas. A non-luminous flame results. This has two advantages over the yellow flame: 1. it is hotter and 2. it burns cleaner.

If there is a rushing air sound you have too much air. The flame may lift or blow itself out. Cut down on your air supply.

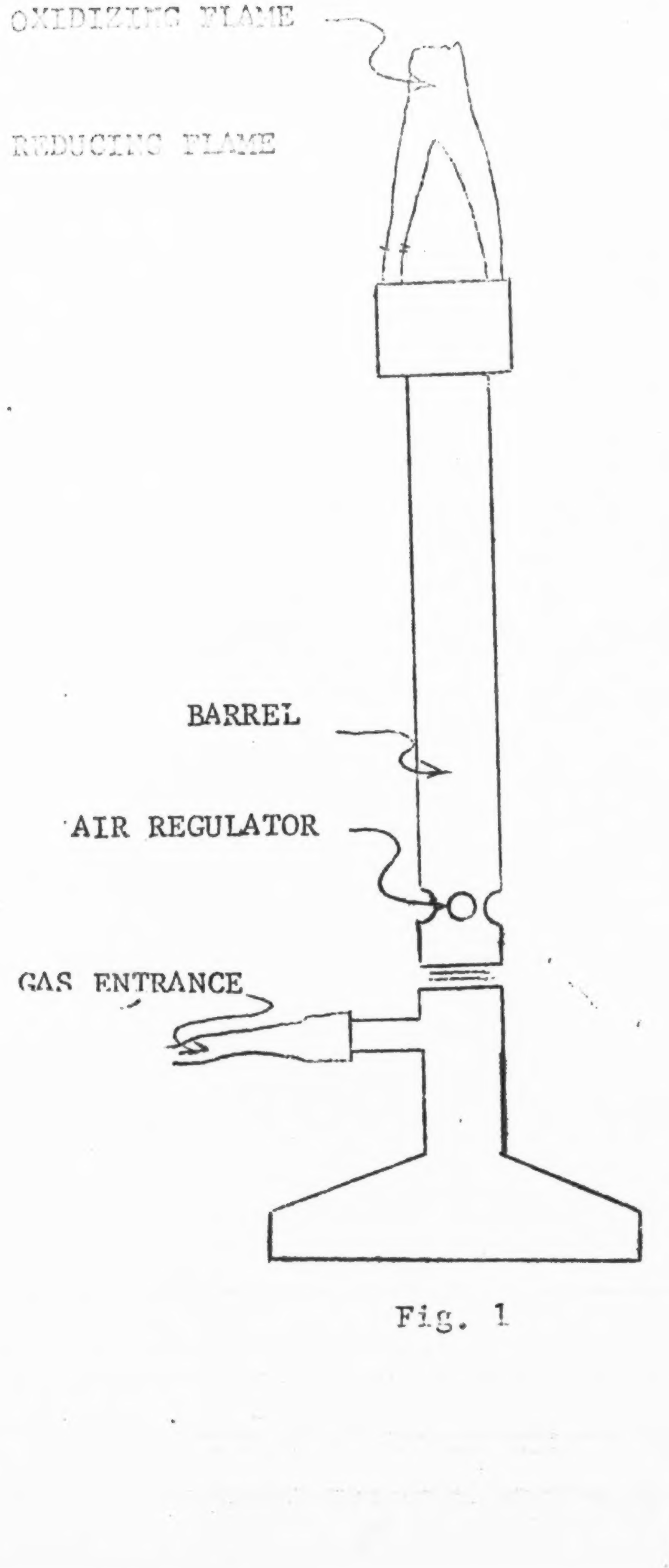

OXIDIZING FLAME
REDUCING FLAME
BARREL
AIR REGULATOR
GAS ENTRANCE

Fig. 1

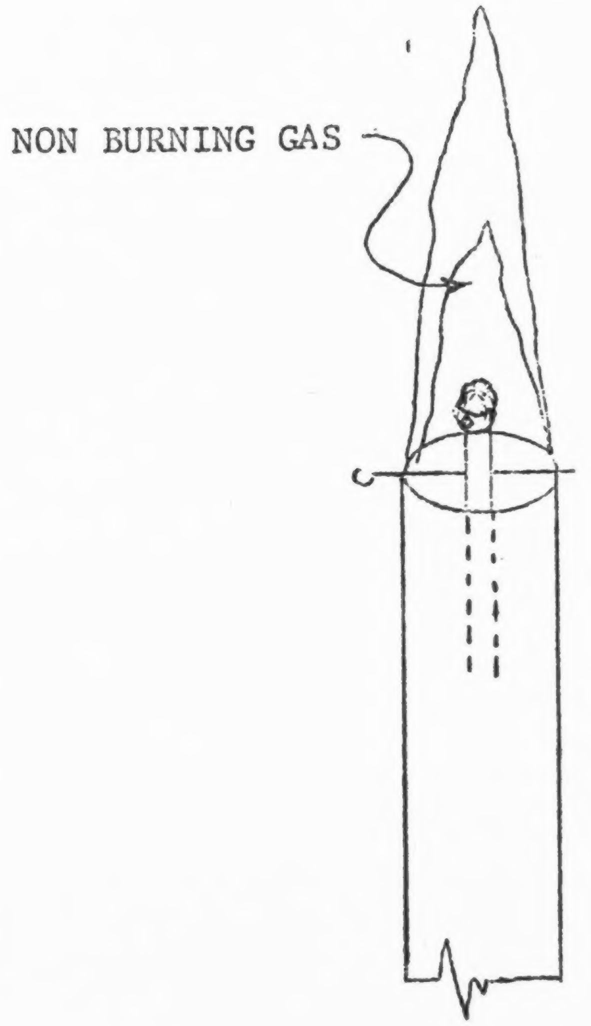

NON BURNING GAS

Fig. 2

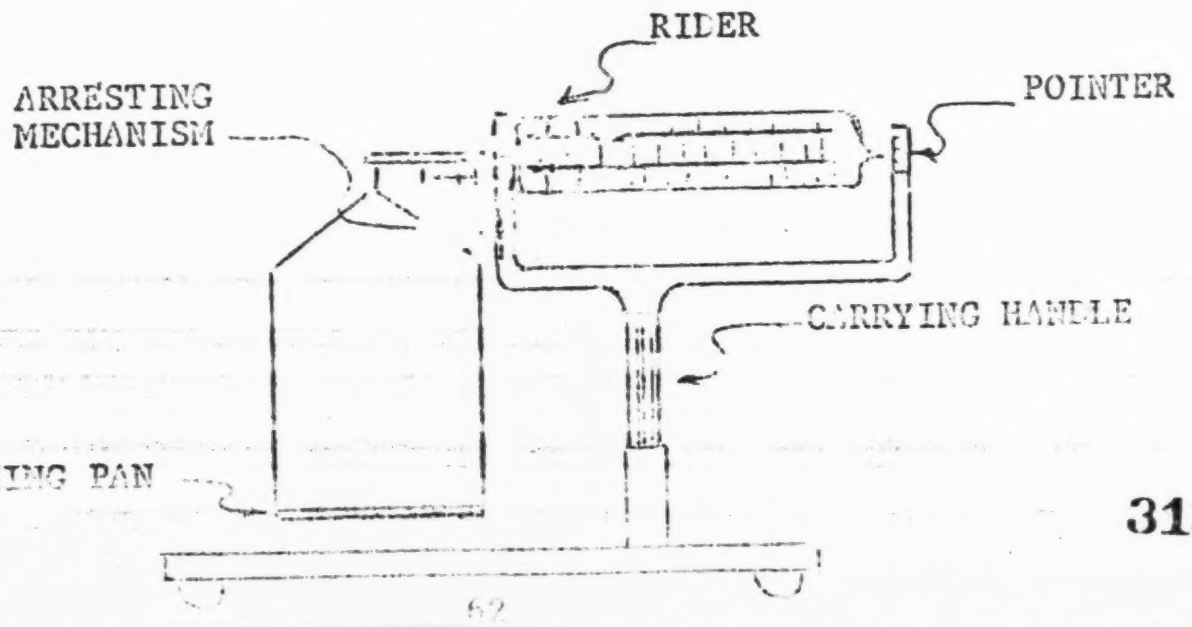
The burner may "strike back", which means the gas is burning inside the barrel. Turn the gas off immediately. Do not touch the barrel; it is hot. After the burner cools, decrease the air supply and relight the burner.

Take your burner apart, clean it if it is dirty, and put it back together.

Suspend a match in the barrel of the unlighted burner. Light the burner as shown in Fig. 2. Why does the match not light?

2. The centigram balance or triple beam balance. Each of the three beams carry a rider. The rider is moved along the beam to provide multiples of 1. g, 10. g, and 0.01 g.

   Unlock the arresting mechanism so that the triple beam is free to move like a see saw. With the weights at zero note where the pointer comes to rest. Put the object to be weighed gentely on the weighing pan and slide the rider so that the pointer will be in its original position. The 1.0 g and 10 g riders must be in the slots on the beam for correct weighting. The 0.01 g rider may have any position in order to balance the beam.



Weigh several objects such as coins, a ring, ball point pen or any light object so that you may learn to weigh quickly and accurately.

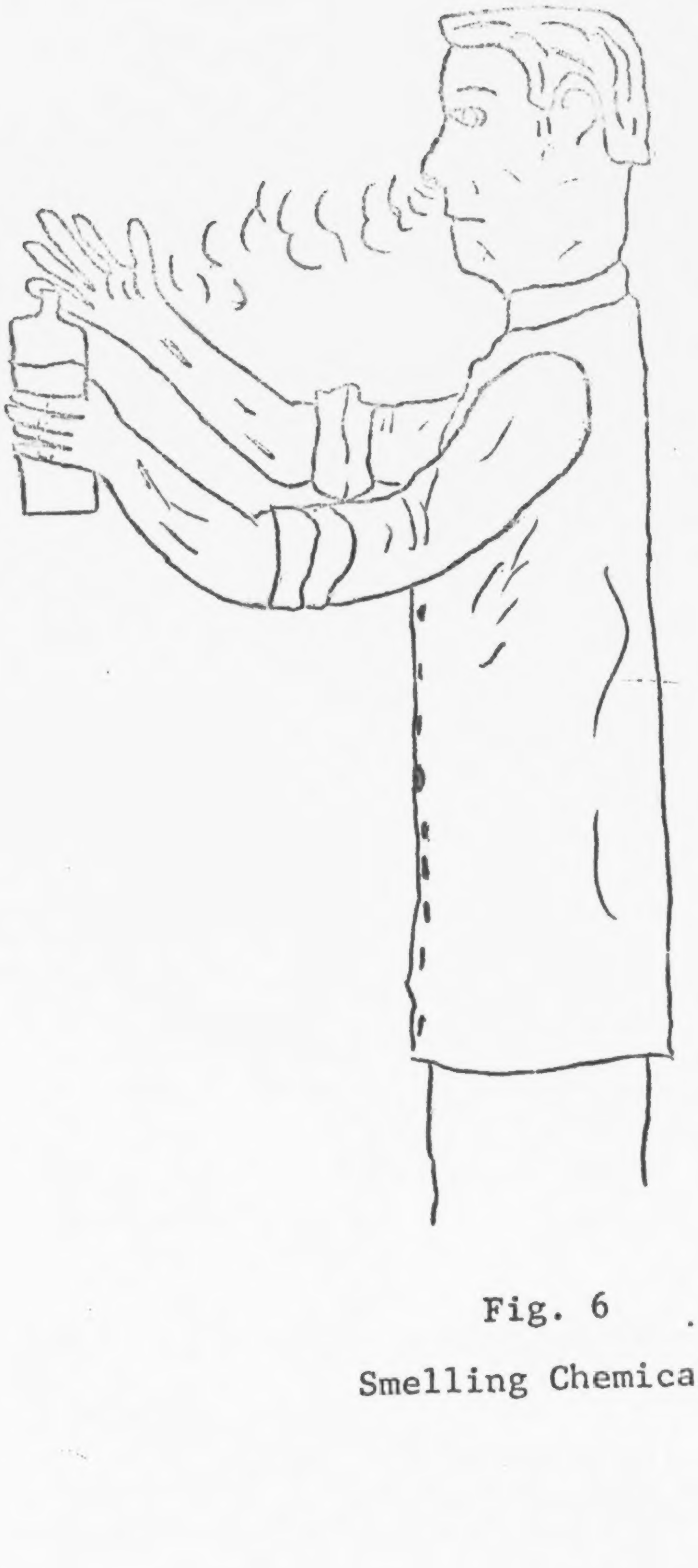


Fig. 6

Smelling Chemicals

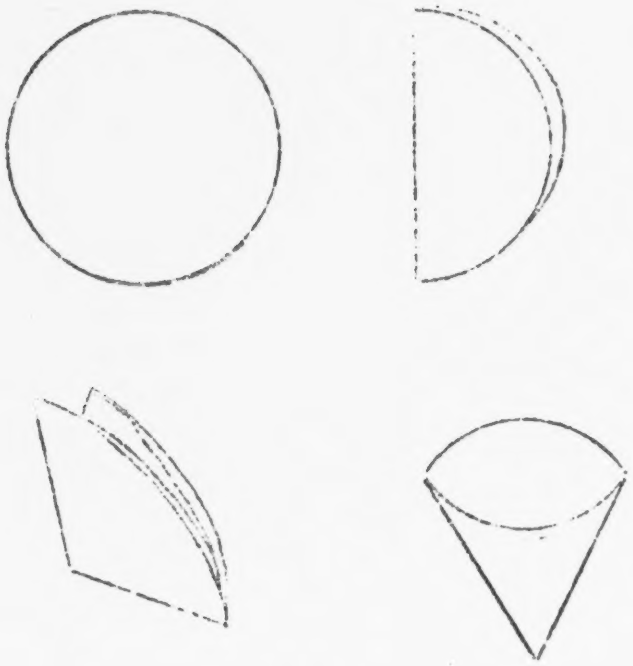


Fig. 7

Folding Filter Paper

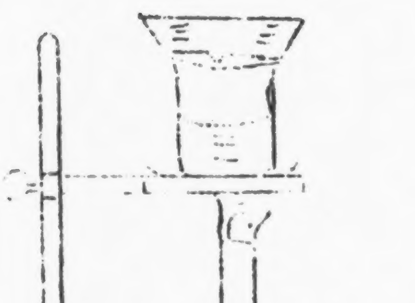


Fig. 8

Water Bath Method of Evaporation

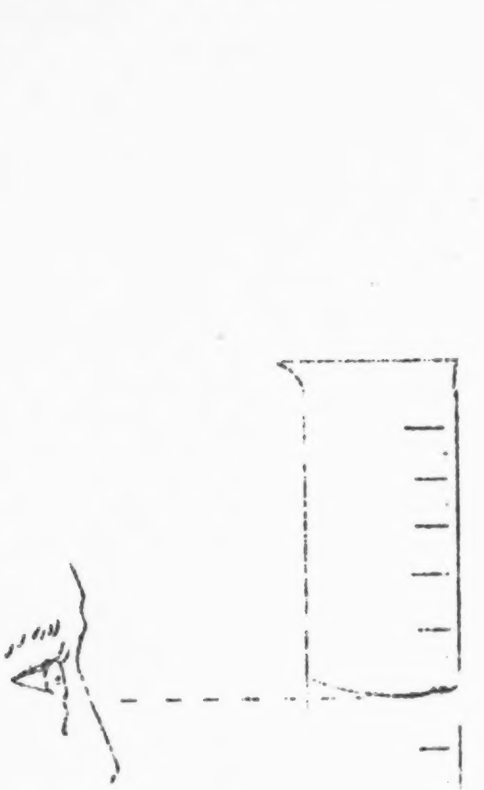


Fig. 9

Read the bottom of the meniscus

Experiment 3

Working with Glass

Many times during the year we need special sizes and shapes of tubing. To buy all that would be required and to store it would be impossible. The most economical method is to cut and shape the glass tubing to fit your individual needs.

Purpose: To become familiar with the safety and techniques of handeling glass tubing.

1. Cutting: In order to cut a piece of glass tubing place the tubing on a pad (or else the file may scratch the desk). Take your file and draw it across the tubing once in each direction. Grasp the tubing in both hands with the thumbs behind the scratch. Push your thumbs out and your hands back and the glass will break at the notch like a match stick.

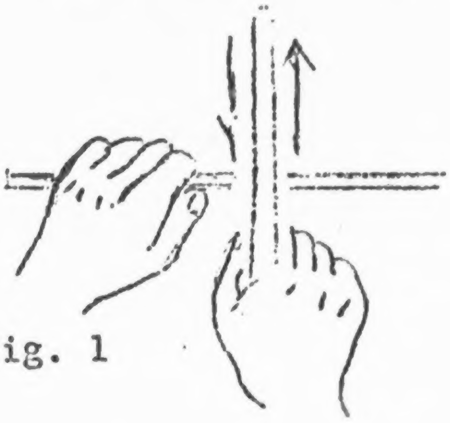


Fig. 1

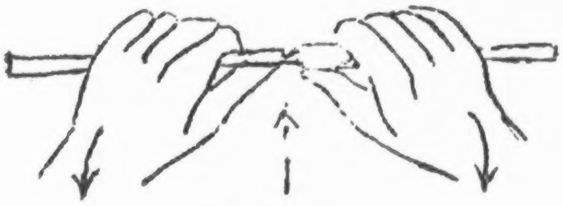


Fig. 2

2. Right angle bend: CAREFUL. You cannot tell hot glass from cold glass by looking. Have your asbestos pad or wire gauze on the table so that you may put your tubing on it while cooling. Put the wing top on the Bunsen burner and light it. The flame should be even across

the top. The wing top is used to spread the flame over a large area so that no kinks will develop upon bending the soft glass. Cut a piece of tubing 16 cm. long. Hold it in the top part of the flame and rotate the tubing back and forth in order to heat evenly on all sides. As the glass tubing starts to get soft a yellow flame will appear which is a result of sodium in the glass. When the tube is soft enough (it takes experience) start the bend while in the flame and finish the bend out of the flame. Hold it in position until firm and allow it to cool on your asbestos pad.

3. Fire polishing: When tubing is cut the edges are sharp and sometimes uneven. The edges must be rounded off so they will slide easily through rubber stoppers. Hold the sharp edges in a Bunsen flame until smooth. The smaller the tubing the quicker it will become smooth. Be careful not to allow the tubing diameter to become smaller. BE CAREFUL OF HOT GLASS!

4. Jet tip: Heat a 16 cm. piece of glass tubing in the middle so that it becomes soft. Keep rotating the tubing to heat evenly and avoid bending. When soft take the glass out of the flame and pull apart. Cut the tube and fire polish.

Do not use your wing top for this procedure.

5. Inserting glass tubing in a rubber stopper: Lubricate the glass and stopper with water. Hold the glass near the stopper and with a rotating motion push the tubing through the stopper allowing it to project about 1 cm. on the other side. If the tubing will not go through--STOP - see your instructor; you may have the wrong size tubing or stopper. Always take apart glass tubing and rubber stopper for storage.

Show your right angle bend and jet tip to your instructor.

Experiment 4

To Separate Sand and Salt

Purpose: To make use of some lab equipment and to develop techniques used in the laboratory.

1. Weigh out 5.0 g of fine sand and 3.0 g of table salt. Mix these together in a 100 ml beaker. Add 50 ml of tap water and stir until all of the salt dissolves.
2. Set up your apparatus for filtering and filter the water, salt and sand mixture.
3. Save the filtrate (the liquid that went through the filter paper).
4. Set up your apparatus for water bath evaporation. Pour about one half of the filtrate in your evaporating dish and evaporate. Taste the residue in your evaporating dish. We assume, of course, that you have used clean equipment throughout the experiment.
5. Devise a method for separating a mixture of 3. g of iron filings and 3. g of powdered sulfur. Write it out as part of your lab so that anyone can follow your direction.

Experiment 5

Melting Point of a Solid Crystal

Purpose: To determine the temperature at which a particular solid melts.

Fig. 1
Celcius Thermometer With
Melting Point Tube

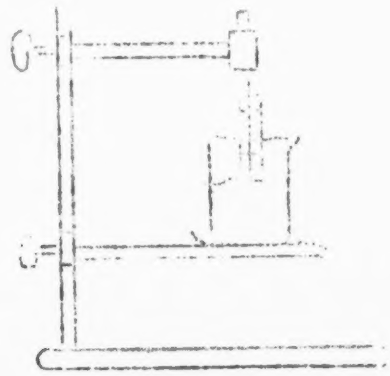


Fig. 2
Note the Thermometer is Not
Touching the Bottom of the Beaker

1. Seal one end of the melting point tube by heating in a Bunsen flame.
2. After cooling put about a 2 cm length of the crystals in the tube. You can do this by pushing the open end of the tube down on a pile of paradichlorobenzene. To get the crystals to the bottom of the tube turn it right side up and tap lightly on a pad or some firm surface. If that does not work, stroke a file lightly across the opening of the tube and the crystals will vibrate to the bottom.
3. Prepare a table in your notebook to record both temperature and time.

Time/Minutes	Temperature	Observation
0		
.5		
1.5		

Continue until the paradichlorobenzene is melted completely. Be sure to note where it starts to melt.

4. Put 180 ml of water in a 250 ml beaker. Set up your apparatus as shown in Figure 2.
5. Slowly raise the temperature of the water until the paradichlorobenzene is all melted. Take readings every 30 seconds.
6. Now take your readings as the water and paradichlorobenzene slowly cools. The temperature at which the paradichlorobenzene begins to melt or begins to solidify is its melting point.
7. Make a graph using time as the abscissa (horizontal axis) and temperature as the ordinate (vertical axis). Plot both curves, heating and cooling, using different colors for each curve.
8. Study your graph and write a summary report on this experiment.

Experiment 6

Closed Box

Purpose: To use the scientific method to describe an unknown and unseen object.

1. Take the box that your instructor assigns to you and look it over carefully. You are to describe the object inside as fully as you can. Then make one or more scientific guesses as to what it might be.
2. You are not to open the box or destroy it, otherwise you have the facilities of the lab for your investigation.
3. Write your experiment carefully being sure to list all your procedures, observations, and your conclusion.

Experiment 7

Preparation and Properties of Oxygen

Purpose: To prepare several bottles of oxygen and test the oxygen for its properties.

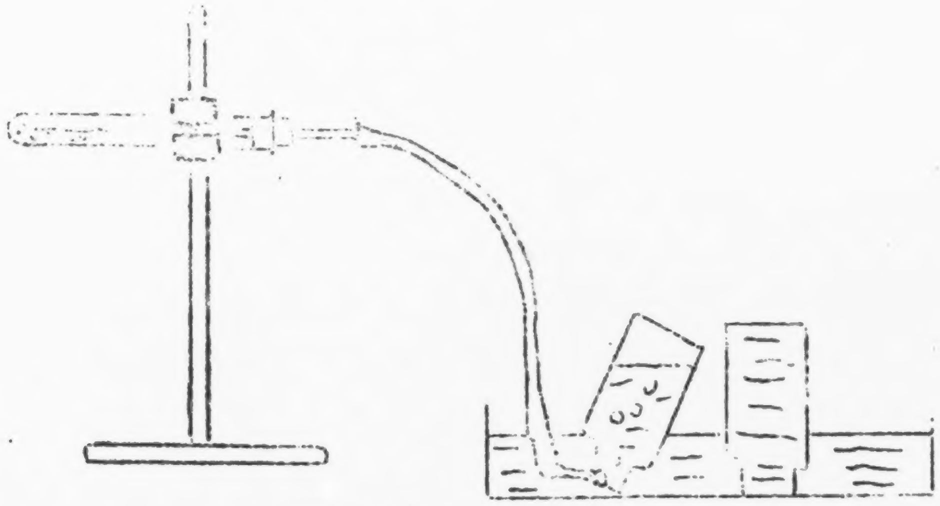


Fig. 1

Observations of Figure 1.

A. Space above oxygen mixture.

B. Oxygen mixture does not extend as far as the clamp.

C. The hard glass test tube is on a slight but definate incline.

D. The delivery tube extends through the rubber stopper. At the trough end of the delivery tube is a small glass bend.

E. The Bunsen burner must be held in the hand and moved back and forth.

F. A 100 ml beaker is handy for bailing water out of the trough as the bottles fill with oxygen. You may set up a siphon if you wish.

Procedure 1. Weigh out 8 g of potassium chlorate and 4 g of manganese dioxide, mix well so that one uniform color is seen. The manganese dioxide acts as a catalyst and allows the chemical reaction to proceed at a lower temperature. Transfer the mixture to the large hard glass test tube and set up the apparatus as in Figure 1.

Fill four wide mouth bottles with tap water and place a glass plate on each. Put two in the trough upside down and have two ready to replace the others when filled with oxygen. One partner handles the bottles and the other handles the Bunsen burner.

Procedure 2. Have your instructor check the apparatus before heating. Heat the test tube gently and allow a few bubbles to escape. Why? Place the delivery tube under the first bottle and begin collecting the oxygen. Collect four bottles of oxygen and then remove the delivery tube from the trough. Why?

The bottles of oxygen can be removed from the trough as follows. Place a glass plate over the mouth of the bottle under water and put it on the table mouth upward with the glass plate on the bottle.

Testing Oxygen

Procedure:

1. Insert a glowing splint into the first bottle of oxygen. Make a note of your observation. Pour about 5 ml of limewater (calcium hydroxide) into the bottle to test the gas produced by the burning splint. Make a note of your observation. What is the name of the gas?

2. Place a piece of sulfur about the size of a match head in the deflagrating spoon. Ignite the sulfur in the Bunsen flame. Note the odor of the gas formed. Lower the burning sulfur into a bottle of oxygen. Note your observation.

   Add 30 ml of water to the gas in the bottle. Shake with the glass plate over the mouth of the bottle. Test the solution with red and blue litmus. Result? Clean the burning spoon by heating it in the hood.

3. Place 50 ml of water in the third bottle of oxygen. Quickly cover the bottle with the glass plate. Heat a piece of picture wire and, while still glowing, thrust it in the oxygen. Do not let the iron touch the sides of the bottle. Result?

4. Obtain some red phosphorus from the instructor. Ignite it and place it in the last bottle of oxygen. Result? When the bottle is filled with the gas produced, immerse the burning phosphorus in a beaker of water. Clean the deflagrating spoon by burning it in the hood. Place 50 ml of water in the bottle, shake and test with red and blue litmus paper. Write a word equation for each of the reactions.

Experiment 8

Elements, Compounds, and Mixtures

Purpose: To recognize the differences among elements, compounds, and mixtures.

Materials: Pyrex test tube, magnet, iron powder, or filings, flowers of sulfur, carbon disulfide, sand and sugar or salt.

Procedure 1. Weigh out 1.0 g of iron filings and 1.0 g of flowers of sulfur. Test each substance to learn whether or not it is attracted by a magnet. CAUTION. Hold the magnet below the paper with the iron and sulfur on it so that it will not become necessary to clean the magnet.

Test the solubility of each substance by placing .5 g of iron filings and a pinch of sulfur in each of two test tubes and add 10 ml of carbon disulfide to each test tube and shake. CAUTION: CS_2 is volatile and combustible. Keep away from a flame.

Procedure 2. Preparation of a compound. Weigh out 7.0 g of iron powder and 4.0 g of flowers of sulfur, mix until the color is uniform. Place the mixture in a test tube and heat until it glows red. Remove from the Bunsen flame and allow the reaction to proceed until it no longer glows.

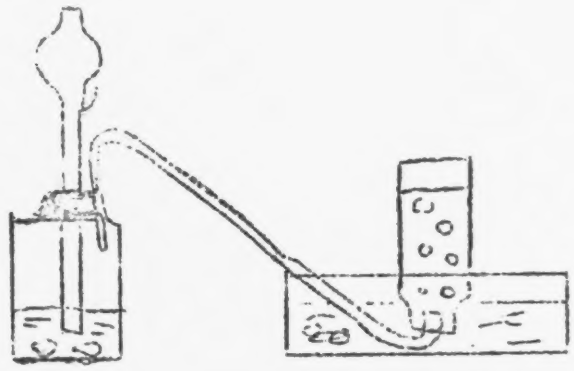
After the reaction is complete, immerse the hot test tube in a beaker of cold water. See if you can name the new compound. Break off a piece and test its solubility in carbon disulfide and test the remaining with a magnet.

Experiment 9

Preparation and Properties of Hydrogen

Objective: To produce hydrogen and study some chemical and physical properties of the gas.

Materials: Wide mouth bottle, thistle tube, delivery tube, water through, test tubes, dilute sulfuric acid, and zinc.



Procedure 1. Set up the apparatus as shown above with one exception. Do not pour the sulfuric acid into the thistle tube until the instructor approves your set up. Be sure the stopper, thistle tube, and delivery tube all fit tightly so that there will be no leakage of hydrogen.

Fill 5 test tubes with water and invert them in the through along with one wide mouth bottle. Ask the instructor to check your apparatus. Now add 25 ml of dilute sulfuric acid to the zinc through the thistle tube. Collect three test tubes of hydrogen and discard by filling the test tubes with water. Fill a test tube with hydrogen and carry it mouth downward to the Bunsen flame and ignite the gas. Repeat until only a slight pop is heard. Fill two test tubes and one gas bottle with hydrogen.

Procedure 2. Allow one test tube of hydrogen to stand mouth upward for 2 minutes, then bring it mough downward to a flame. Result?

Place a test tube mouth downward over a test tube of air and let stand for three minutes. Bring each quickly to a flame. Result?

Procedure 3. Thrust a burning splint into a bottle of pure hydrogen. Hold the bottle vertically and mouth downward. Slowly withdraw the splint and insert it again in the bottle. Describe what happens.

Procedure 4. Dismantle your apparatus. Save some of the liquid from the hydrogen generator and using the water bath method of evaporation, evaporate to dryness.

Describe the residue.

Write the word equation and the symbol equation for the reaction of zinc and sulfuric acid.